Victor Jorgensen

TECHNICAL MANUAL

DFC 402 8/1-70
PLADEFORDELING

ANTAL PLADER = 66
ANTAL KABELSTIK = 8
ANTAL RESERVEREDE POSITIONER = 0

TYPE	ANTAL	RC-NR.	KREDSLØB
1	7	834-1	12AC401
2	5	839-1	7AC402
3	2	838-1	4AC403
5	1	860-2	4DD402
14	1	884-1	9BA403/1AA405
16	4	835-1	6BC401
17	3	847-1	7AG401
23	1	8016-38	38 POL ELCO
24	7	8016-90	90 POL ELCO
26	1	837-1	3BB401
35	1	836-1	5AC404
37	1	890-1	11DB402/1DB403
41	1	894-1	4DB404/1DB405
43	1	858-1	1AG402
50	1	893-2	1FF402
55	3	898-1	1DB406
56	6	897-1	10DC405
58	1	901-1	1AJ408
60	1	903-1/	1AJ407/1BG407/1CC406
69	1	909-1/	6CB402
72	2	933-1	8DB409
73	8	934-1	3BF403
74	8	935-1	3BD404
75	2	936-1	18DC408
76	1	834-2	12AM401
77	4	3032-1	12AD401

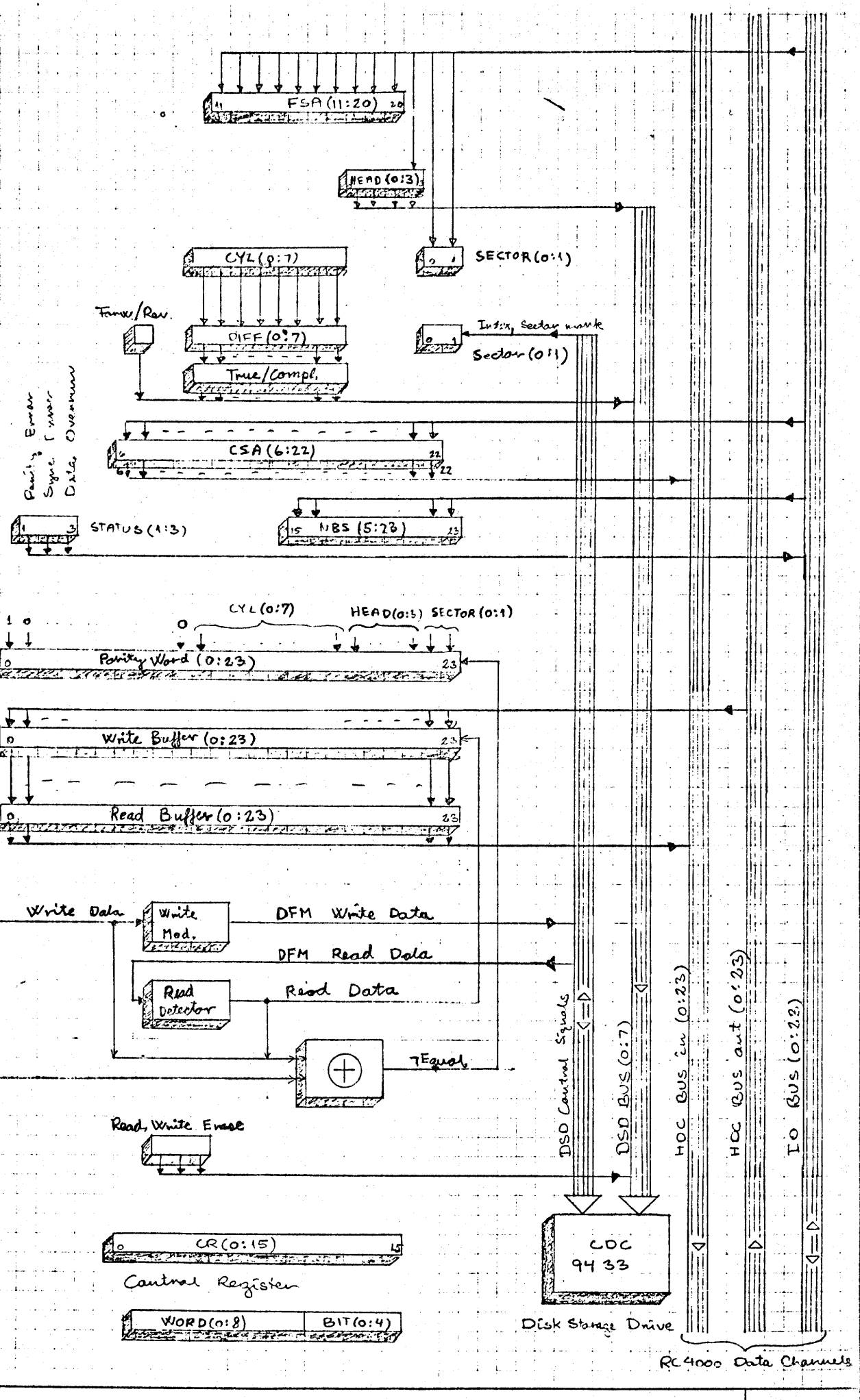
DFC 402 8/1-70
TUBLE POSITION LIST

FORMAT = 3 x 26

IND	AKT	TYP	SYM	TYP
1	64	16	49	72
2	66	16	50	72
3	62	60	70	56
4	65	69	52	75
5	67	1	53	75
6	21	2	36	37
7	44	77	23	17
8	10	14	22	1
9	9	17	9	17
10	16	74	8	14
11	15	74	57	35
12	45	1	18	77
13	75	50	19	74
14	74	5	17	74
15	23	3	11	74
16	22	1	10	74
17	14	74	31	73
18	12	77	30	73
19	13	74	21	76
20	41	74	51	43
21	19	76	6	2
22	8	1	16	1
23	7	17	15	3
24	42	74	46	17
25	40	74	44	73
26	39	74	45	73
27	70	16	76	55
28	50	77	77	55
29	68	26	78	55
30	18	73	35	73
31	17	73	34	73
32	33	73	33	73
33	32	73	32	73
34	31	73	71	56
35	30	73	72	56
36	6	37	73	56
37	46	2	74	56
38	48	1	55	58
39	47	77	26	74
40	69	2	25	74
41	72	16	20	74
42	49	2	24	74
43	51	1	56	2
44	25	73	7	77
45	26	73	12	1
46	24	17	37	2
47	71	3	39	77
48	52	1	38	1
49	1	72	42	2
50	2	72	28	77
51	20	43	43	1
52	4	75	48	1
53	5	75		
54	73	41		

55	38	58		
56	43	2		
57	11	35		
62			3	60
63			75	56
64			1	16
65			4	69
66			2	16
67			5	1
68			29	26
69			40	2
70	3	56	27	16
71	34	56	47	3
72	35	56	41	16
73	36	56	54	41
74	37	56	14	5
75	63	56	13	50
76	27	55		
77	28	55		
78	29	55		

KABP	X	Y	TYPE
1360	37	393	24
1361	37	-30	24
1362	195	395	24
1363	195	-30	24
1364	350	395	24
1365	350	-30	24
1366	-60	55	24
1369	-60	105	23



A/S REGNECENTRALEN	
Designed by 04.02.70 FEH	
Drawn by	
Dwg. Office C	
Design Check	
Replaces Dwg. No.	
due to ECN	
Repla... Dwg. No.	
Unit RC 4...	OFC 402 - DISK STRUCTURE
Dwg. No.	

RC doc: V8 140

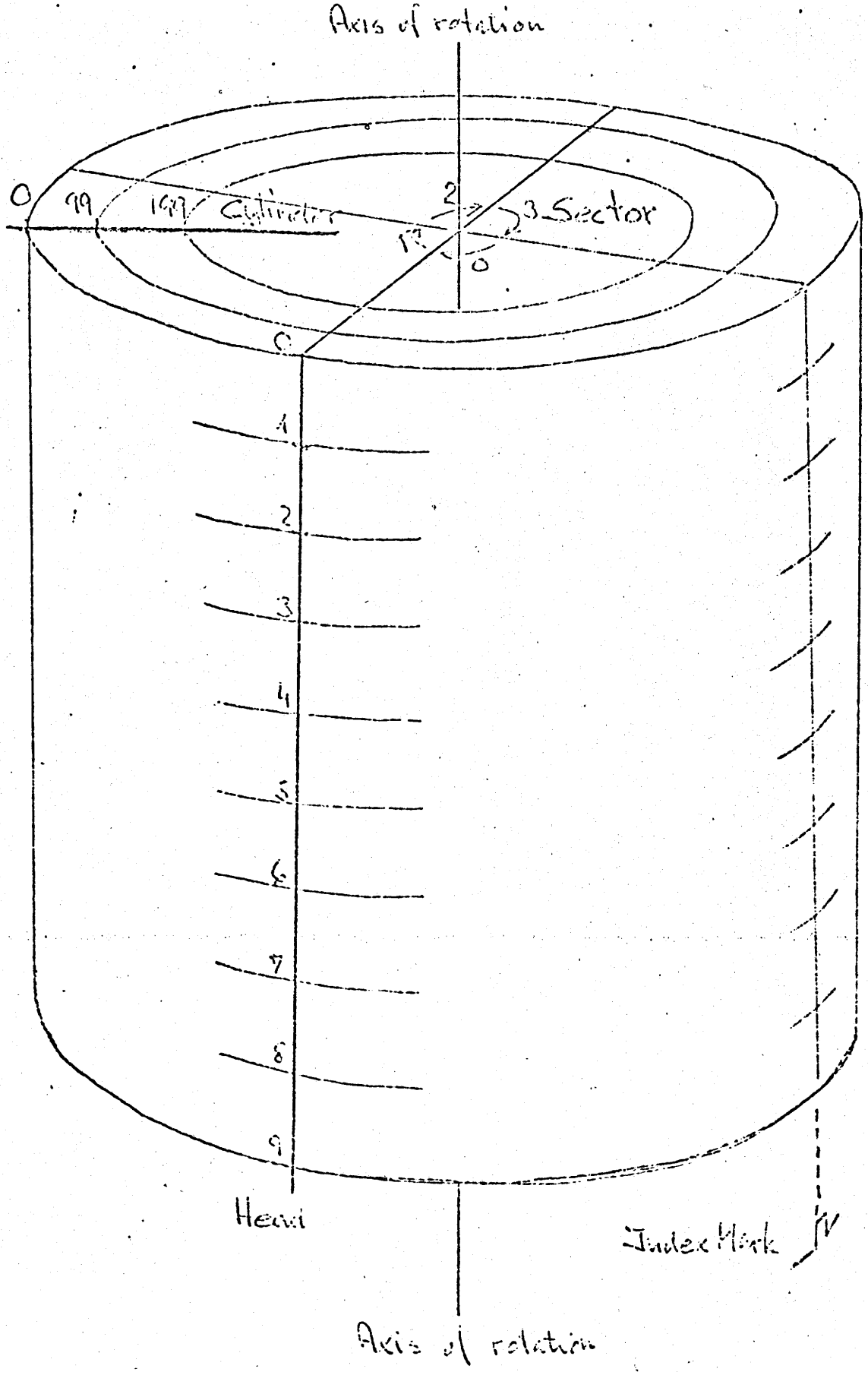
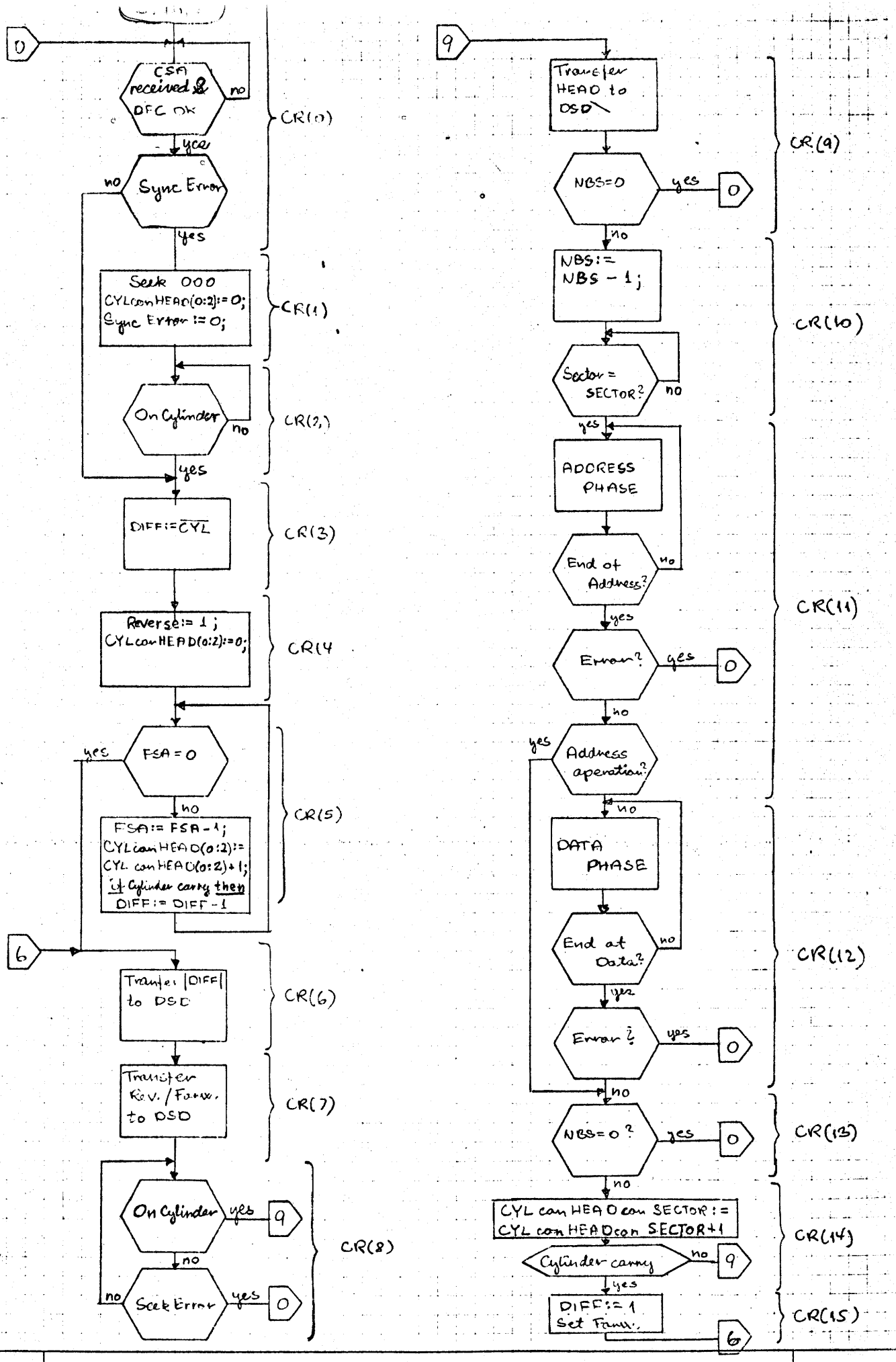


Figure ____. Location of Cylinders, Heads, and Sectors on a Disc Kit.

The Disc Segment Number is 40 x Cylinder + 4 x Head + Sect



Designed by 040270 EGP
Drawn by
Dwg. Office Check
Design Check
Replaces Dwg. No.
due to ECN
Replaced by Dwg. No.

A/S REGNTRALEN

Unit

Dwg. No.

DFC 402
FLOW DIAGRAM

NC doc. V8 140

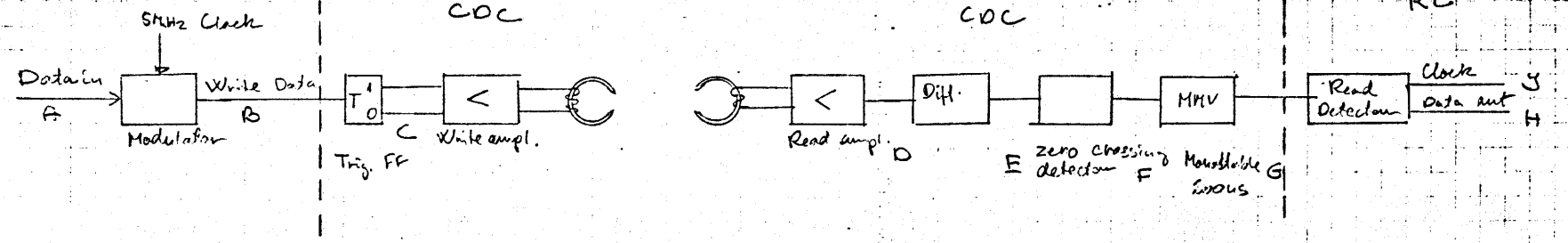
AGF 193

Rè

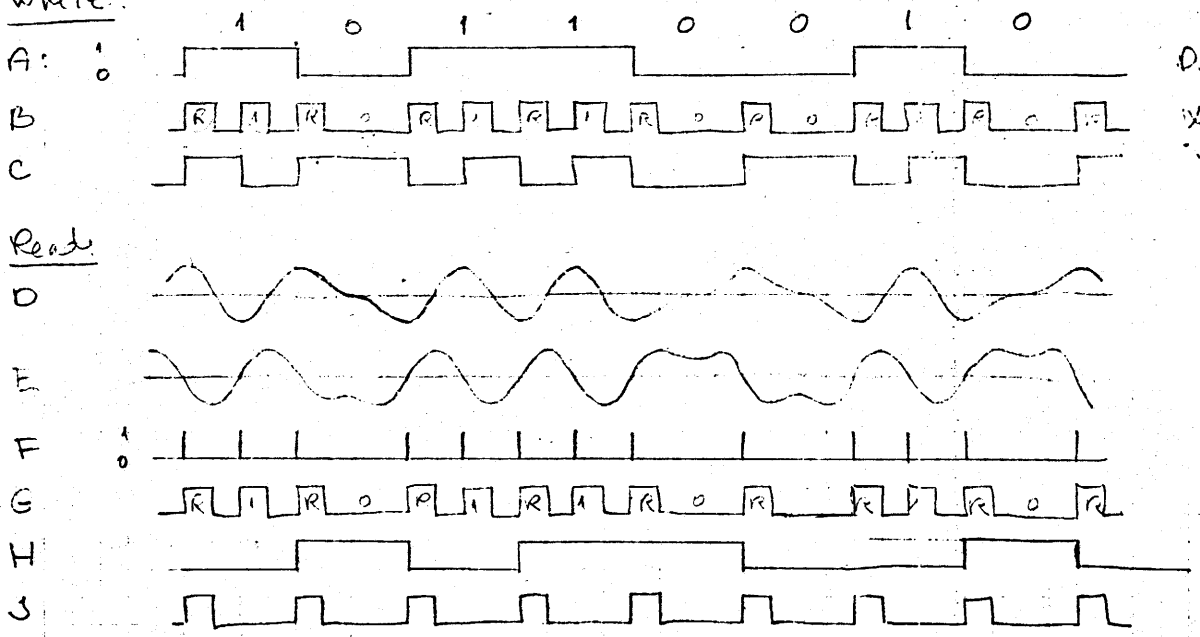
CDC

CDC

Rc



Write:



Read:

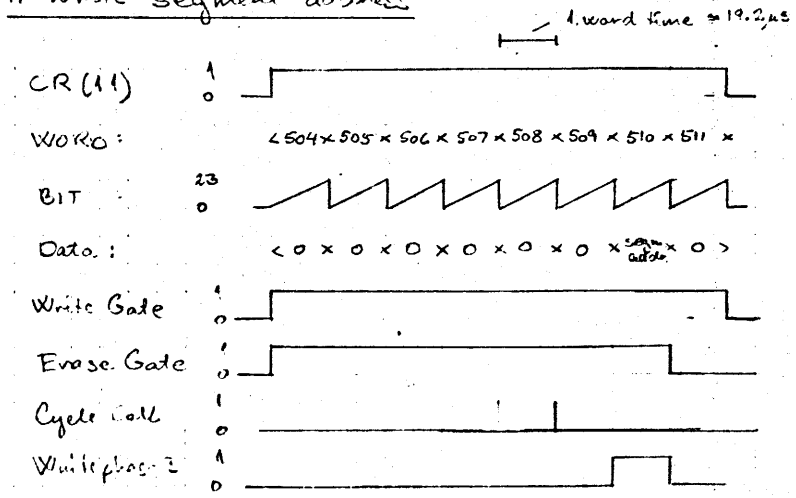
Unit: DFC	Designed 7.10.69	Read - Write signals	Drawing No
BEGNE CENTRALEN	Approved		Drawn by
	Checked		Checked
	Last Revision		Sheets / Sheet

A/S REGNECENTRALEN	Designed by	Drawn by	Dwg. Office	Design Check	Replaces Dwg. No.	due to ECN	Repla… Dwg. No.
	04.02.70 FBF						

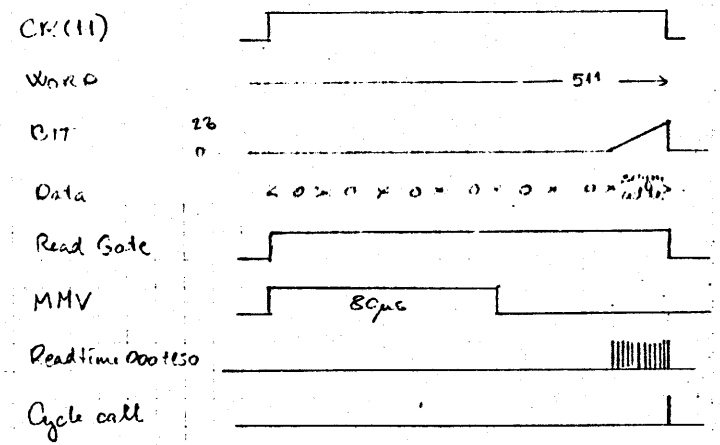
Dwg. No. | Unit

VARIOUS CONTROL ADDRESS TIMING DIAGRAMS

1. Write segment address



2. Read segment address

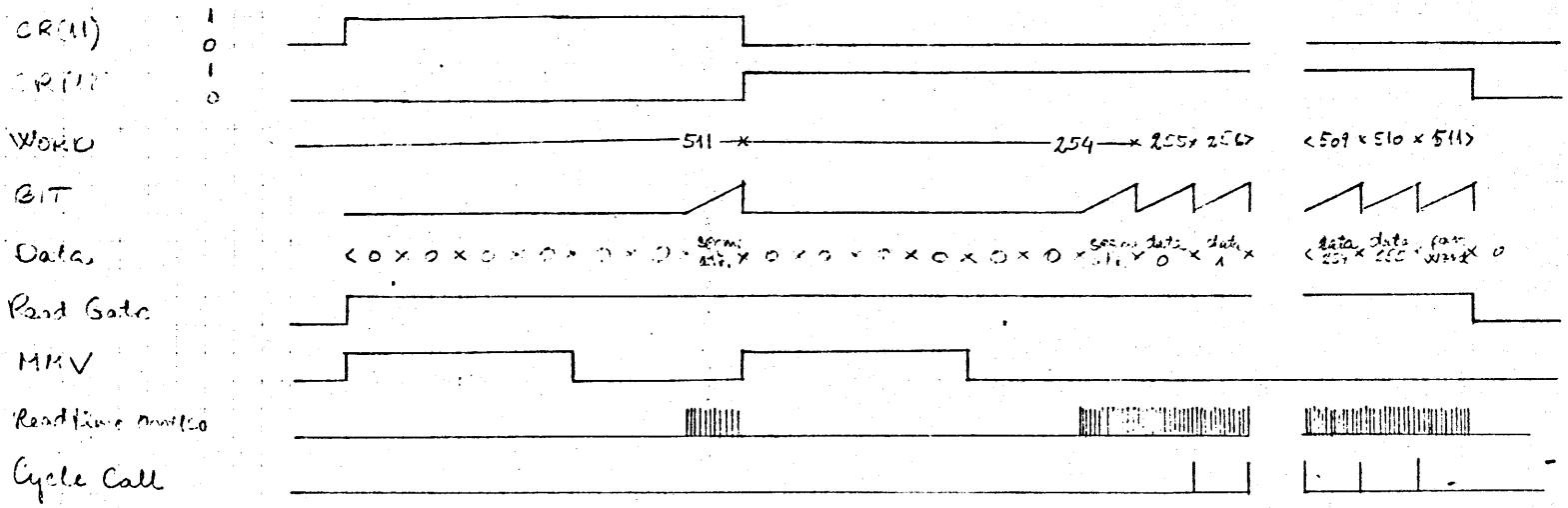


Segment address format:

1 0 0 0 0 0 0 0 0 0 cyl. address × head × sect.

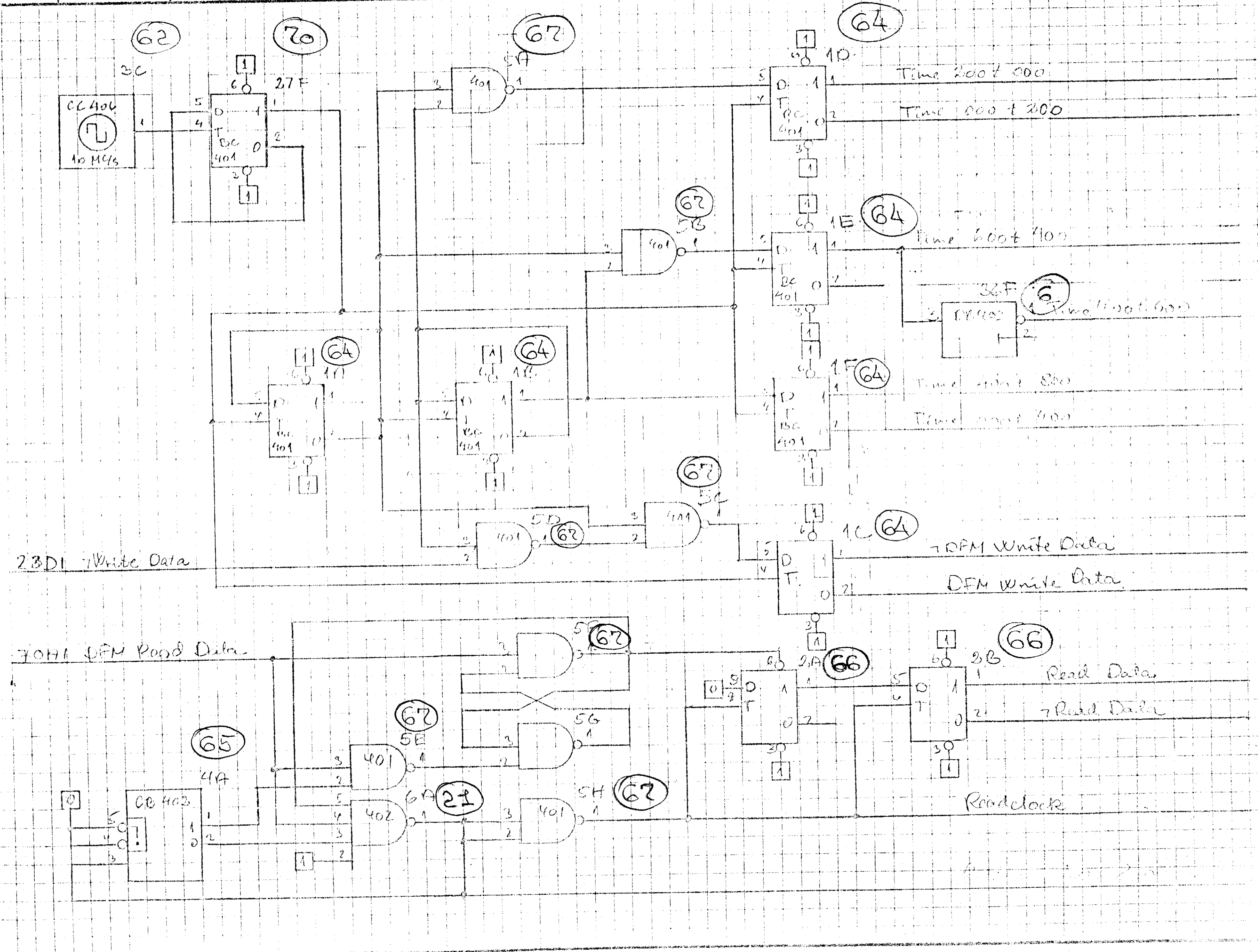
Dwg. No. | Unit

4. Read Data.



READ DATA TIMING DIAGRAM

A/S REGNECENTRALEN	Designed by	Drawn by	Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	Replaced by Dwg. No.



Unit

Dwg. No. V11801

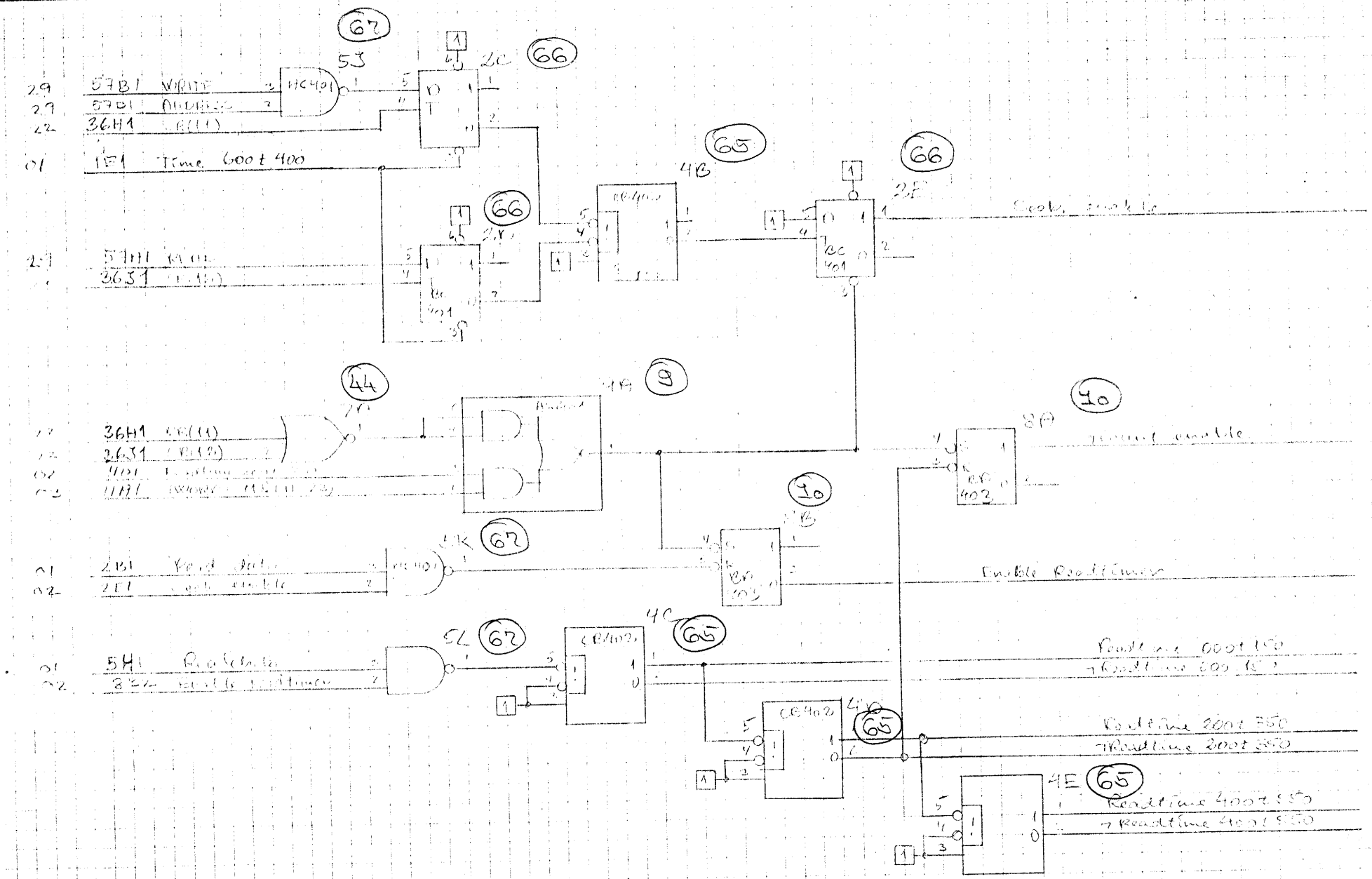
CLOCKGENERATION, WRITEMODULATOR AND READDETECTOR

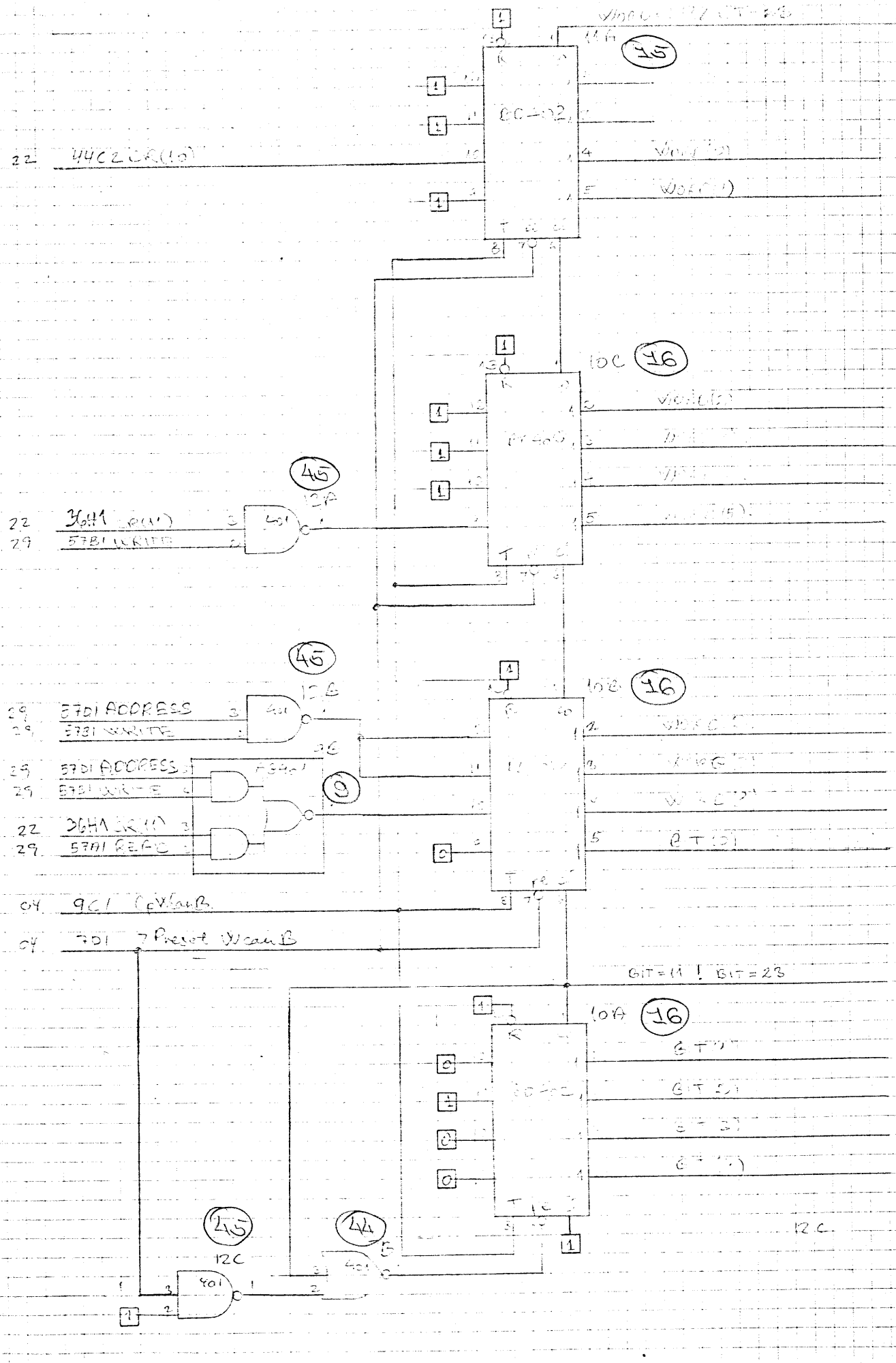
RC doc. VB 140

A/S REGNECENTRALEN	Designed by	Drawn by	Dwg. Office	Design Check	Replaces Dwg. No.	due to ECN	Replaces Dwg. No.

DWG. No. VB 802

Unit RC4000

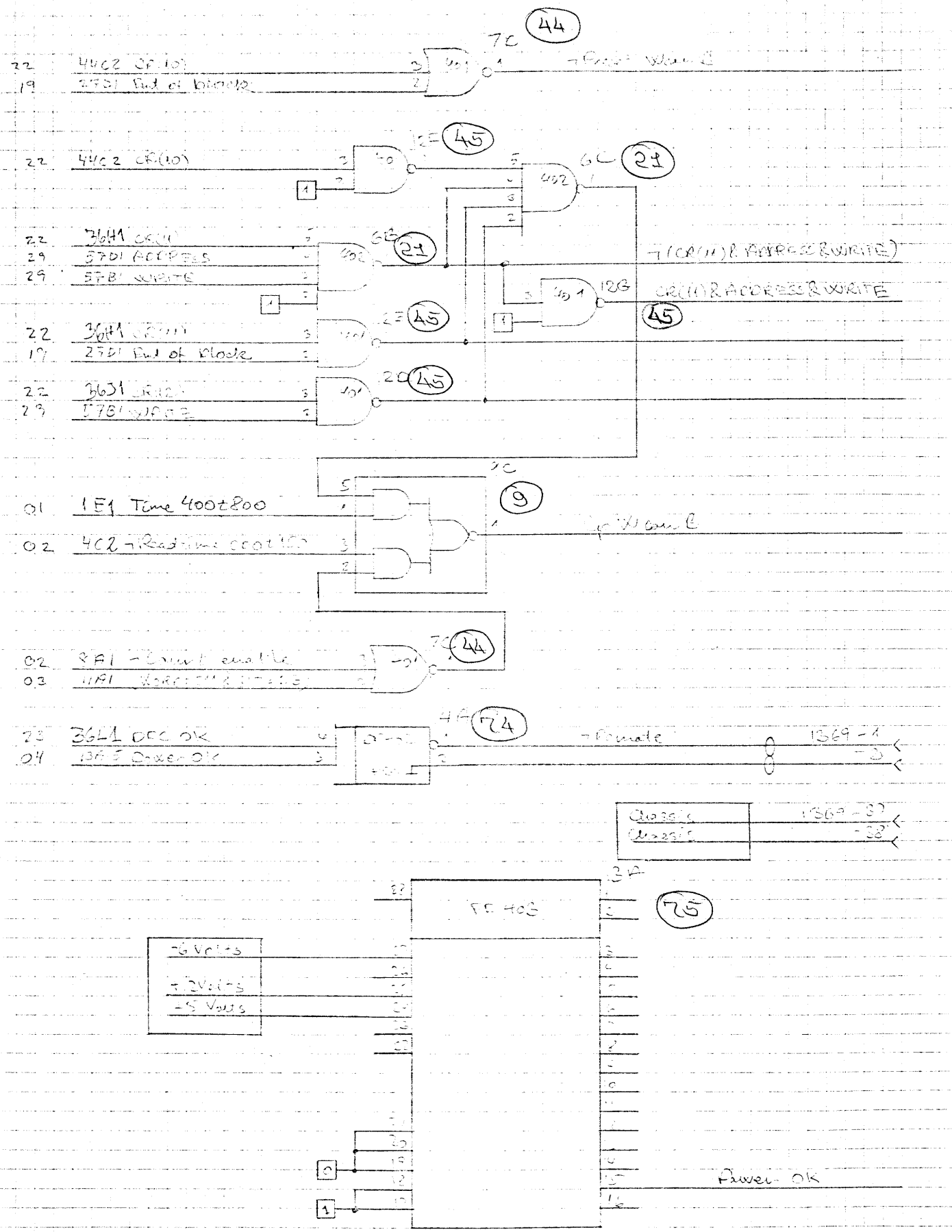




Unit RC4000	WORD COUNTER (WORD 0 BIT 0-4)	DRG -
Dwg. No. V11803		

A/S REGNECENTRALEN | Designed by | Drawn by | Dwg. Office | Design Check | Replaces Dwg. No. | due to ECN | Re... by Dwg. No.

Dwg. V11803

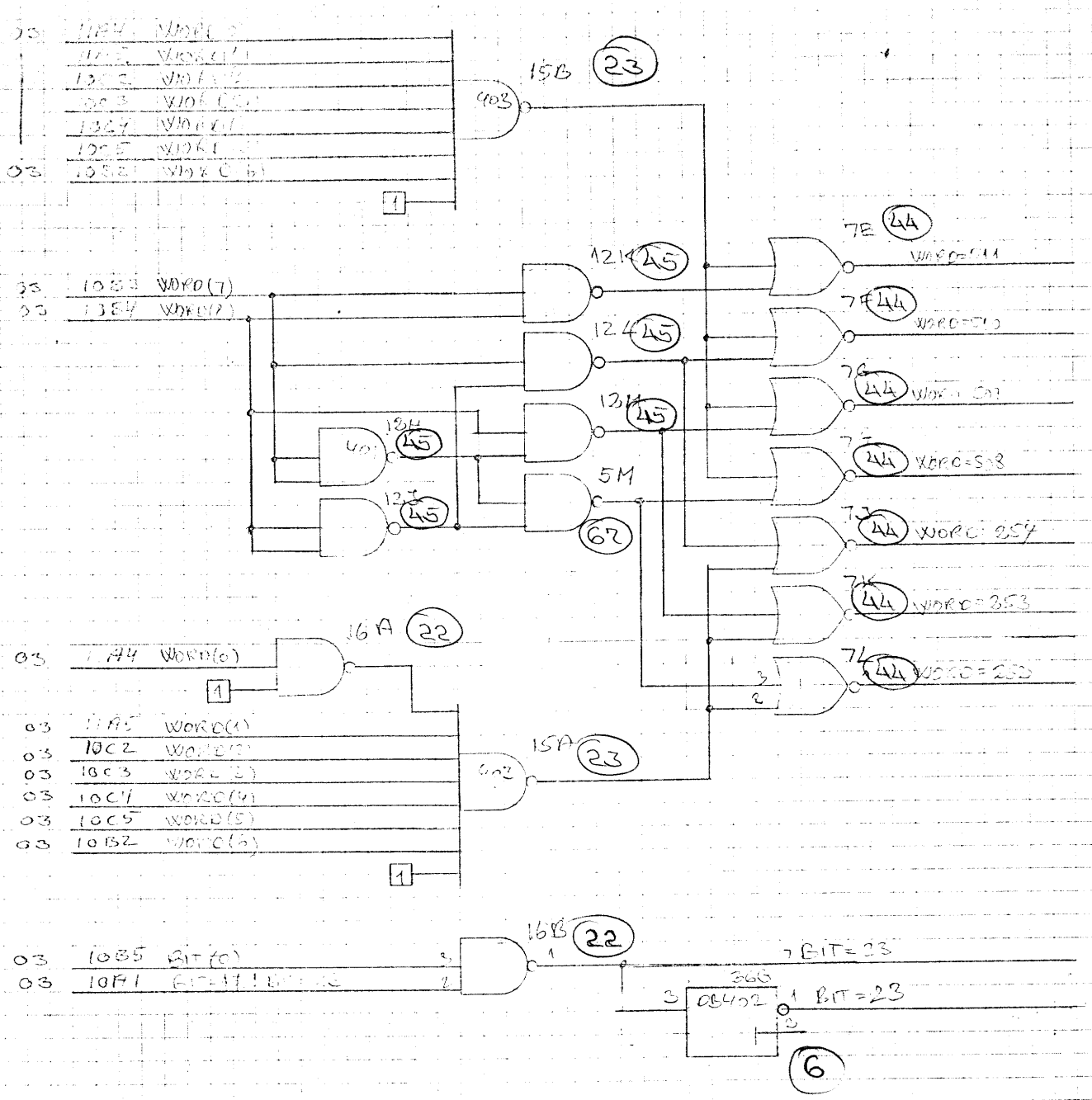


Unit RC4000	WORK AND ET COUNTER CONTROL			
Dwg. No. V11804				

Designed by | Drawn by | Dwg. Office Ch. | Design Check | Replaces Dwg. No. | due to ECN | Repl. Dwg. No.

A/S REGNECENTRALEN

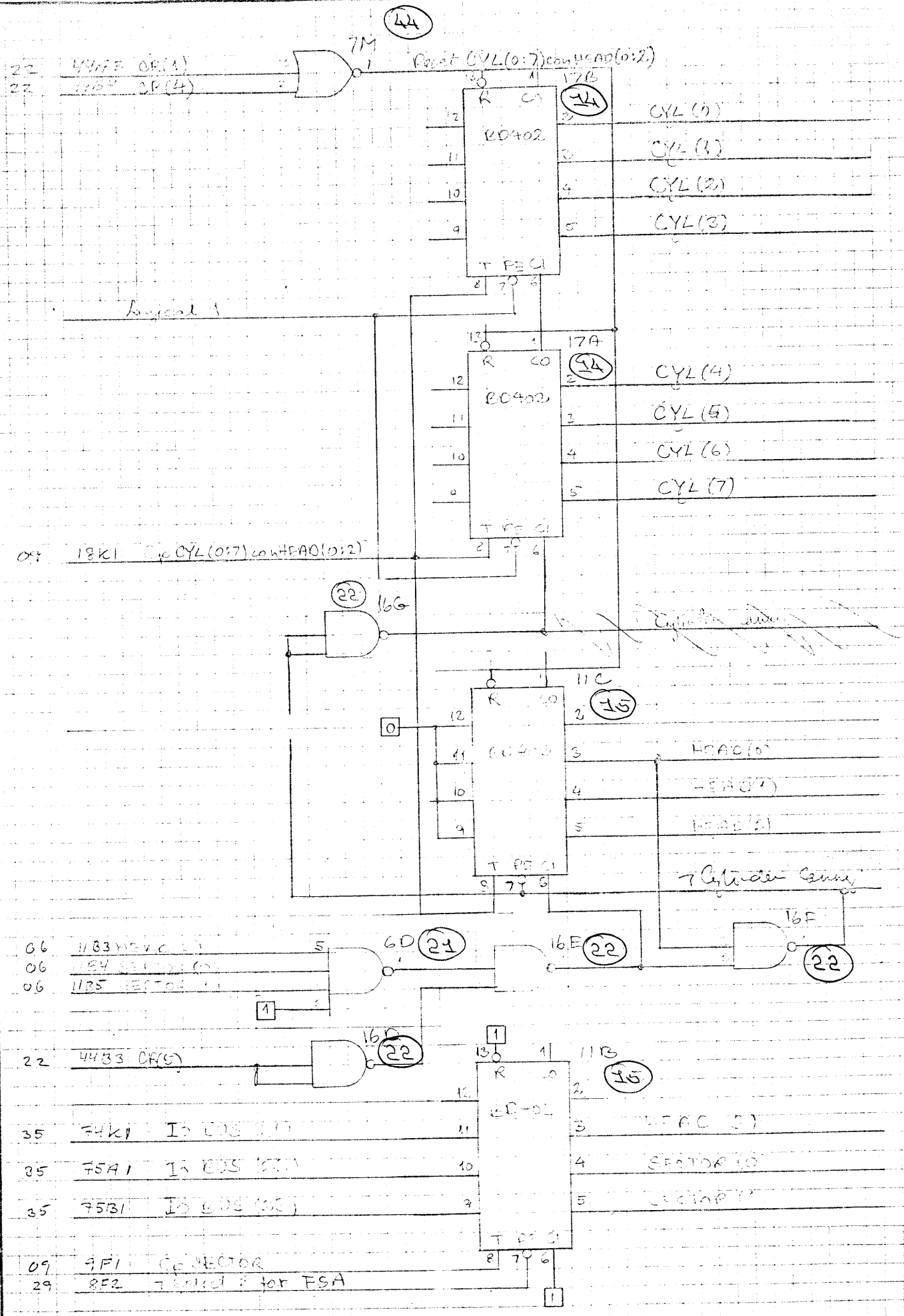
RC doc. V8 1/69



A/S REGNECENTRALEN	Designed by	Drawn by	Dwg. Office Check	Design Check	Replaces Dwg. No. / Replaced by Dwg. No. due to ECN

RC doc VB 149

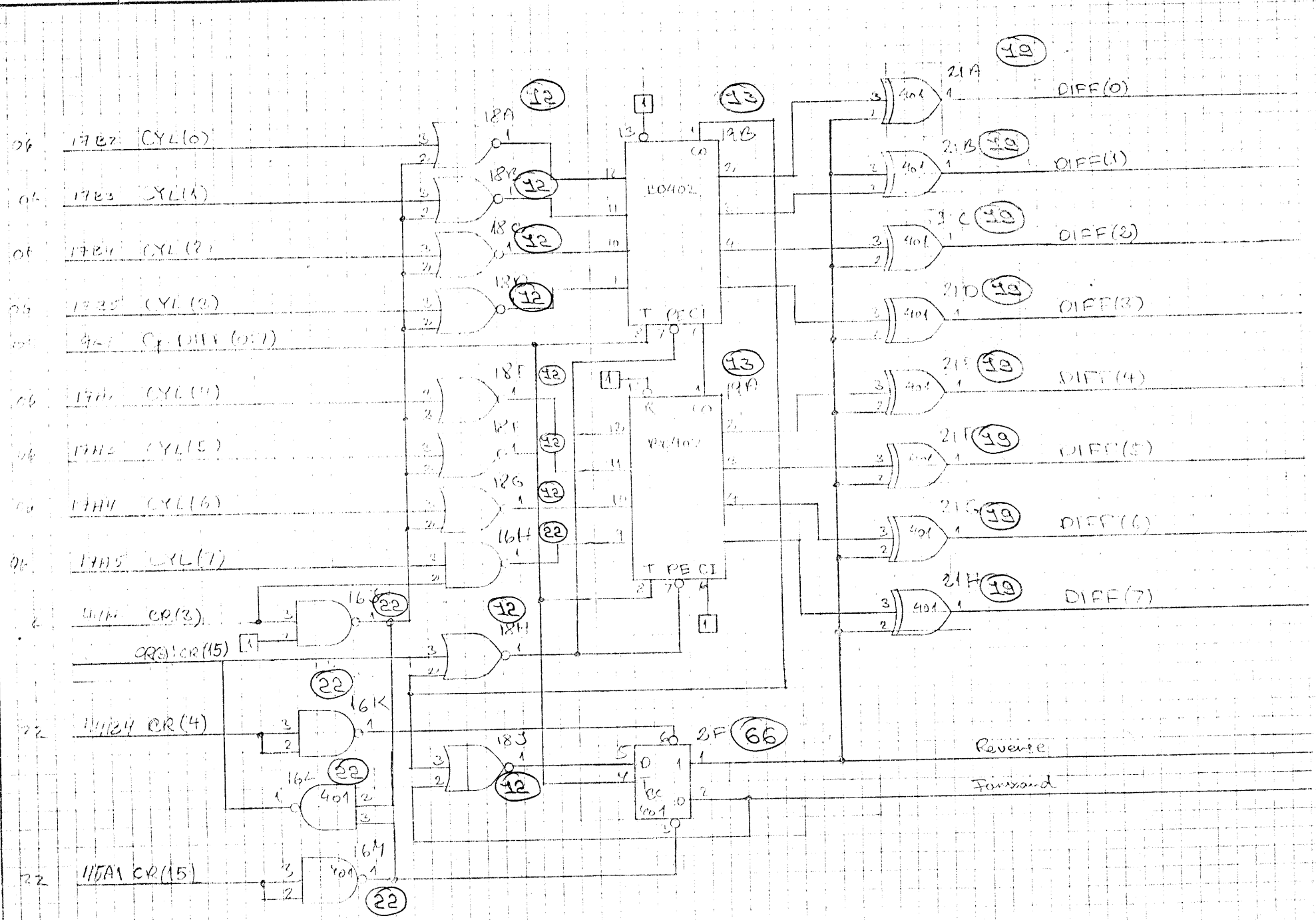
Unit: RC4000	WORD AND BIT RELEVING Logic Diagram	OFC-5
Dwg. No.: V11805		

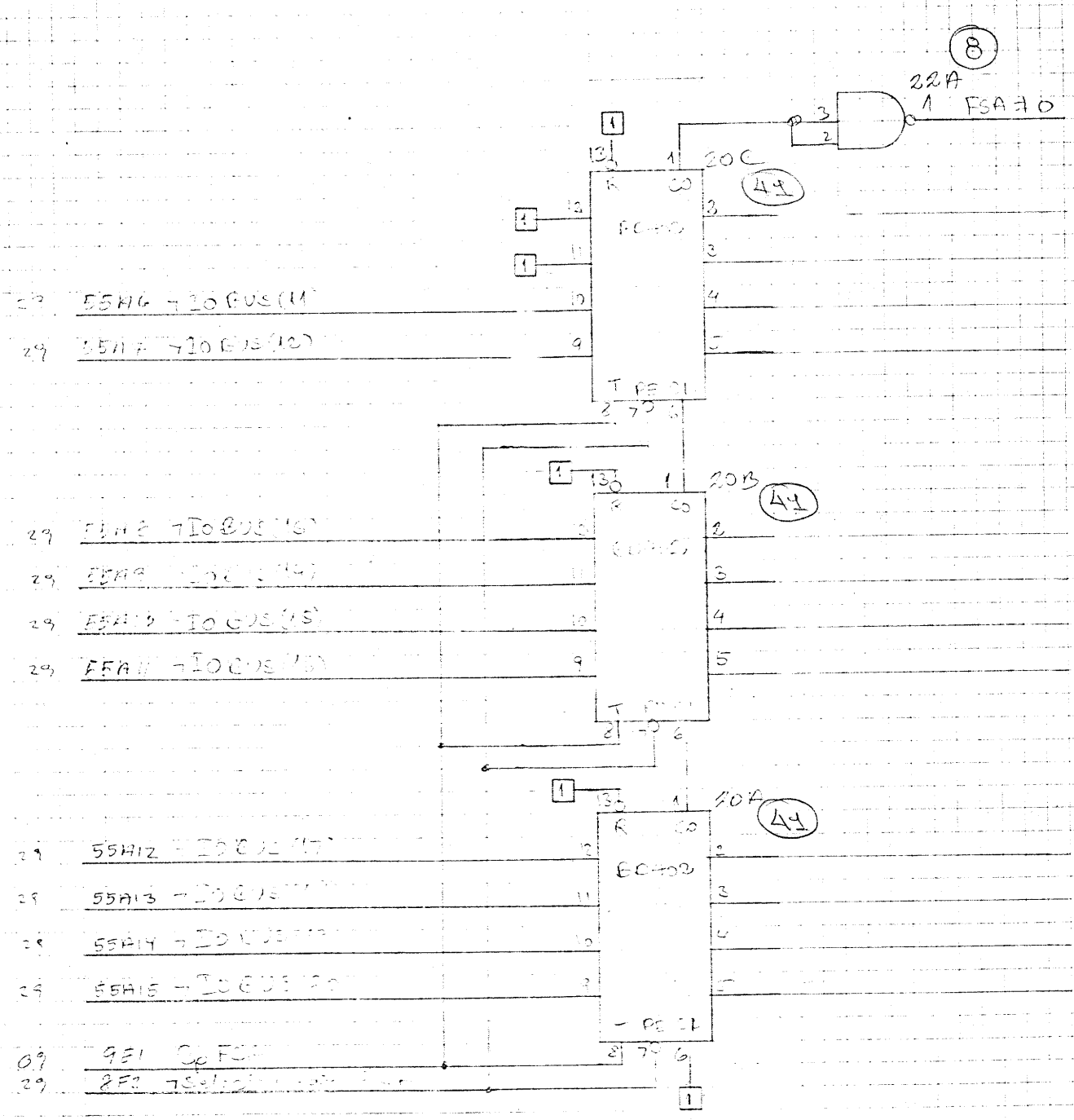

(44)
7M
Read CYL(0:7) and HEAD(0:2)
RD402
CYL(0)
CYL(1)
CYL(2)
CYL(3)
logical 1
CYL(4)
CYL(5)
CYL(6)
CYL(7)
18K1
CYL(0:7) and HEAD(0:2)
16G
Cylinder addr
HEAD(0)
HEAD(1)
HEAD(2)
Cylinder comp
16F
16E
16H
SECTOR(0:1), HEAD(0:3) CYL(0:7)
Logic Diagram

RC doc: VB 140

A/S REGNECENTRALEN	Designed by	Drawn by	Dwg. Office Chec	Design Check	Replaces Dwg. No.	due to ECN	Replac wg. No.

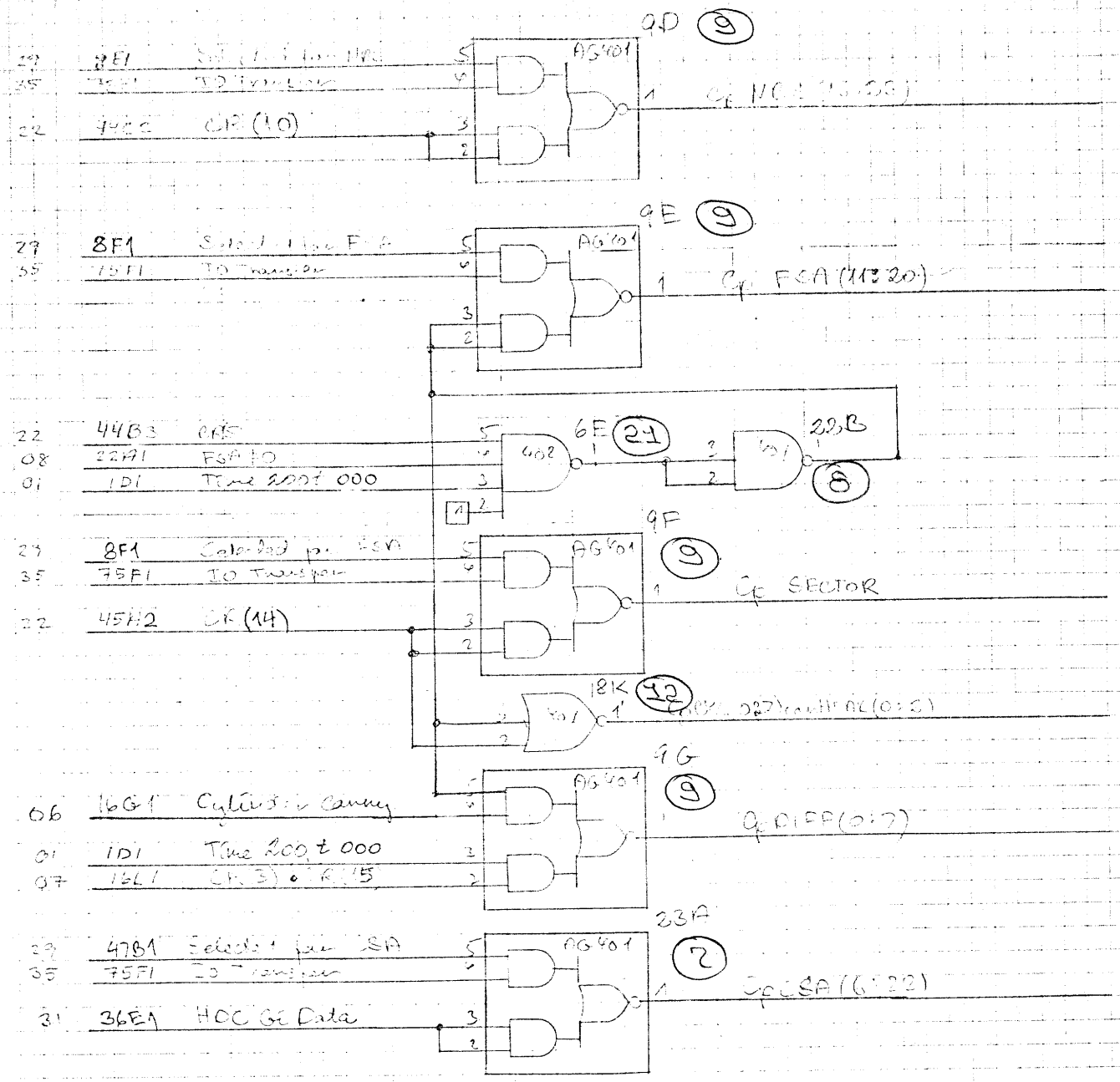
Dwg. No. VMSC7 | Unit





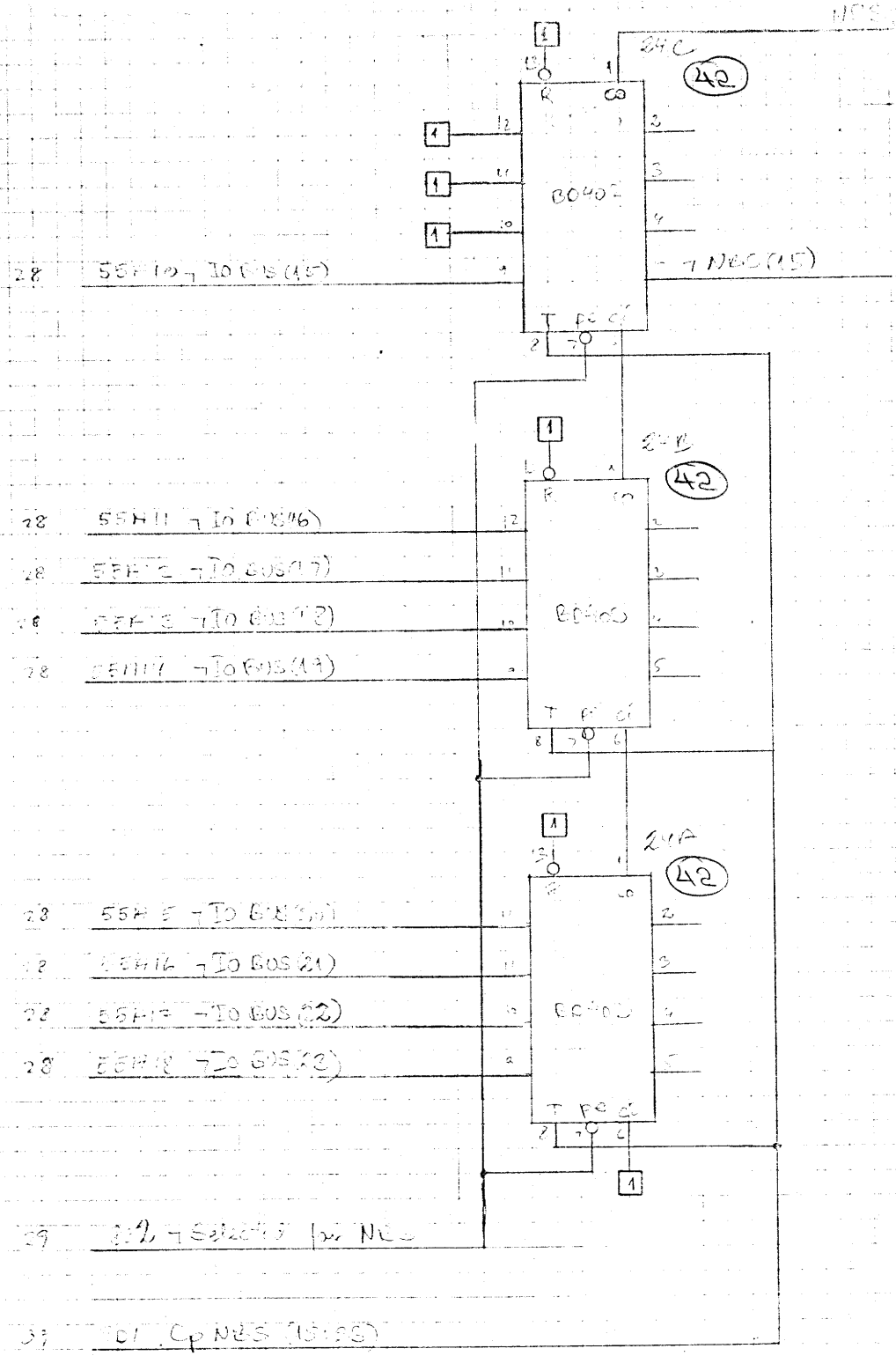
A/S REGNECENTRALEN	Designed by	Unit	
	Drawn by	Dwg. No. V11308	
	Dwg. Office Check		
	Design Check		
	Replaces Dwg. No.		
	Rep. / Dwg. No. due to ECN		

EC dwg. VB 146



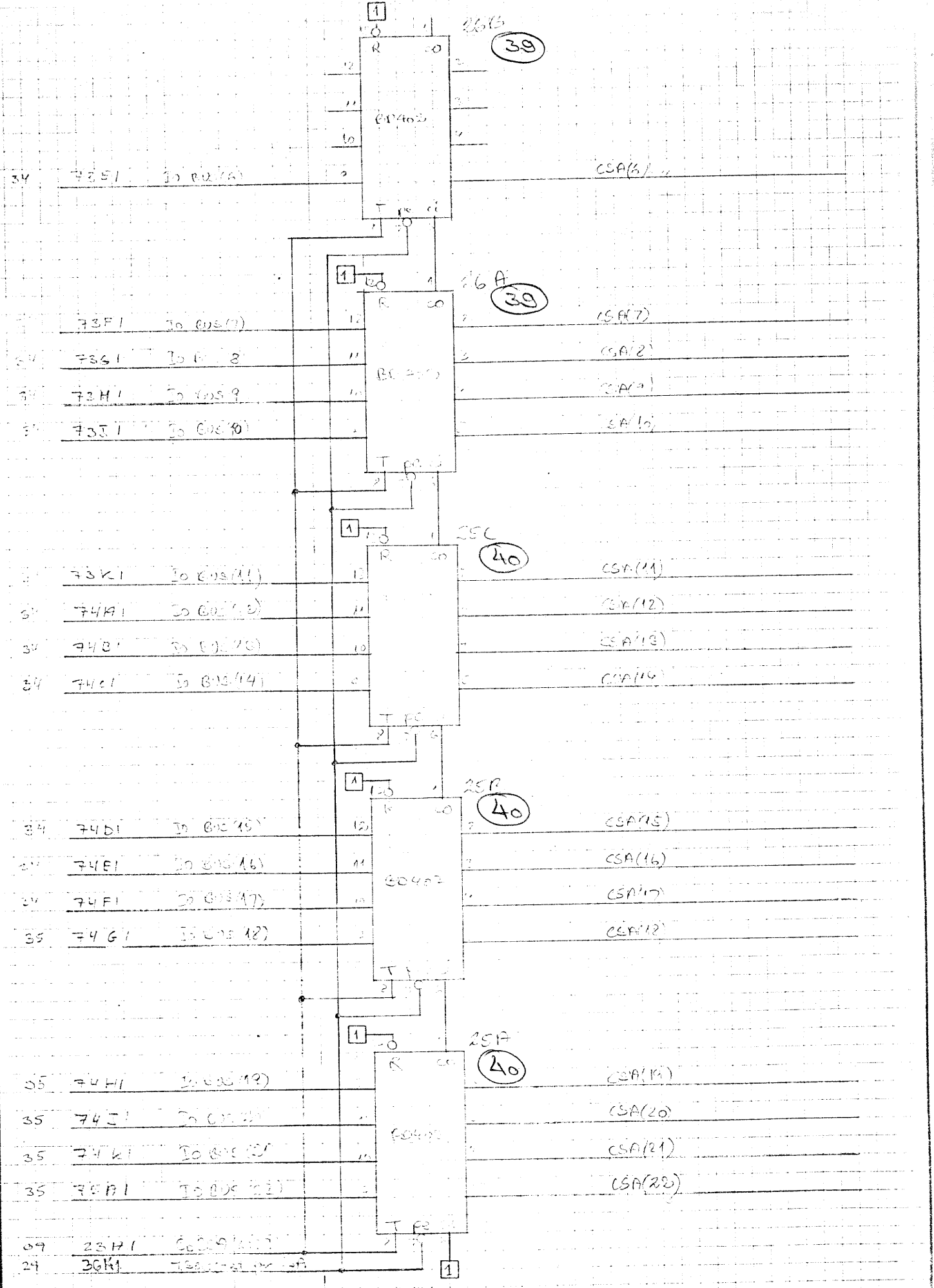
Unit	CLOCKPULSES FOR NBS, FSA, SECTOR, CYL, HEAD, DIFF AND CSA
Dwg. No. V11807	Route Diagram

A/S REGNECENTRALEN
Designed by
Drawn by
Dwg. Office
Design Check
Replaces Dwg. No.
due to ECN
Replaced by Dwg. No.
NC doc VB 140



A/S REGN ZENTRALEN	Unit KC4000	NUMBER OF SEGMENTS, NBS (15:23)	REV -10
Designed by	Dwg. No. V11810	Logic Diagram	
Drawn by			
Dwg. Office			
Design Check			
Replaces Dwg. No.			
Revised by Dwg. No. due to ECN			

PC doc: VD 140



Unit: RC4000

Dwg. No.: V11811

CARRY CHAIN, 16 BIT, CSA(6:22)

DFC

A/S REGNECENTRALEN

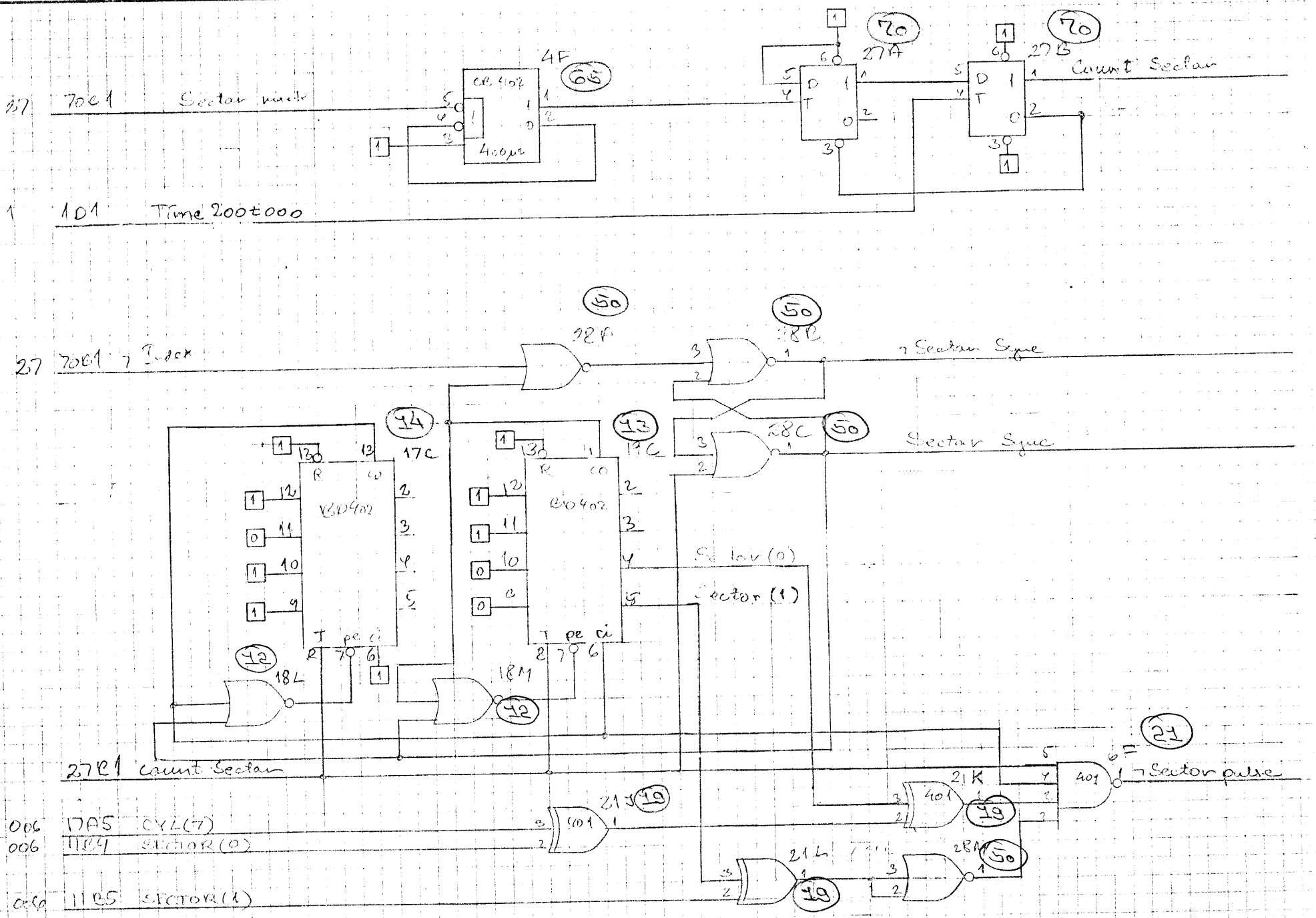
Designed by | Drawn by | Dwg. Office | Design Check | Replaces Dwg. No. | due to ECN | by Dwg. No.

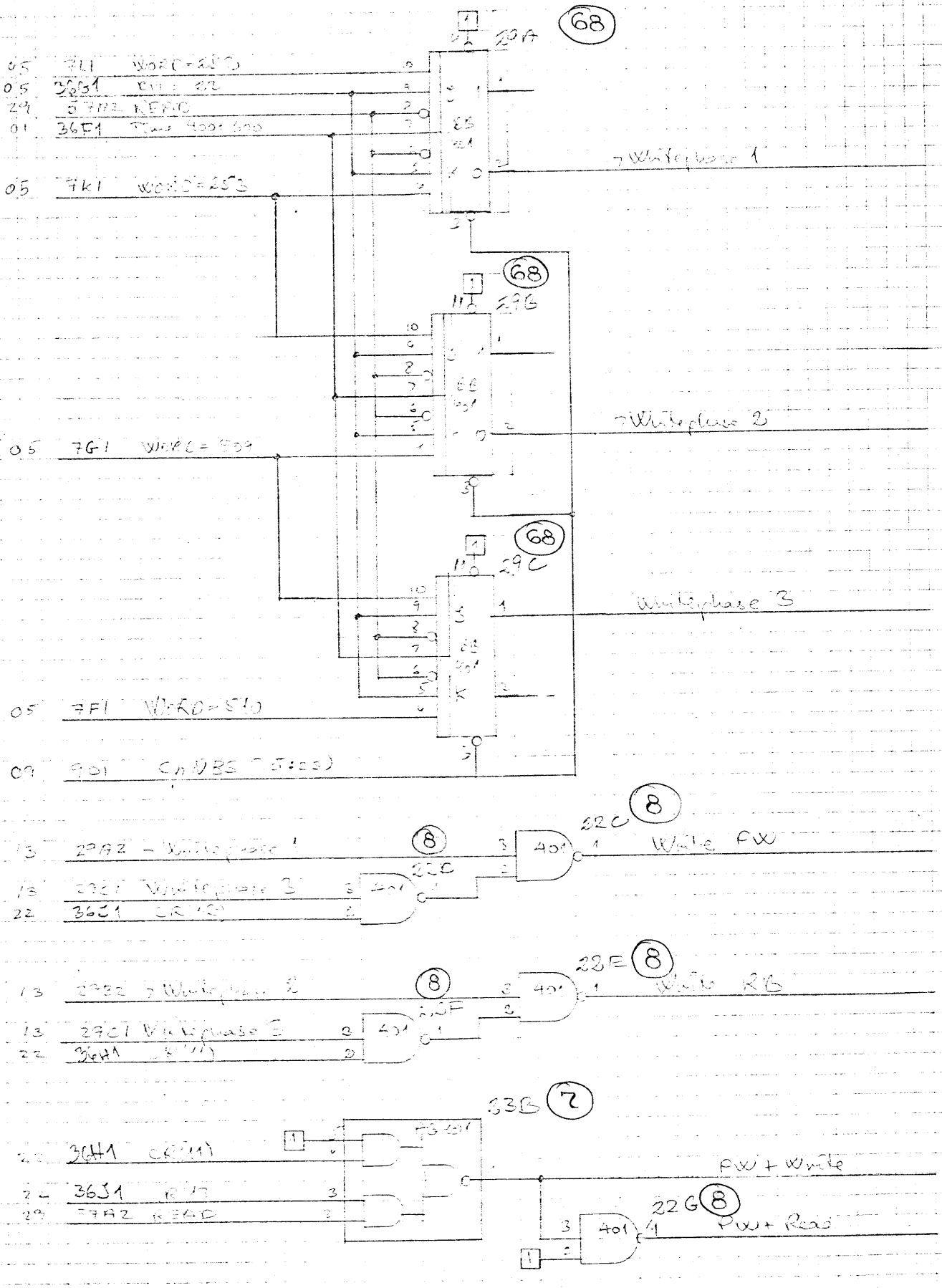
RC doc. V8.140

A/S REGNECENTRALEN	Designed by	Drawn by	Dwg. Office	Design Check	Replaces Dwg. No.	due to ECN	Replaces Dwg. No.

Drawing No. VA1812 Unit

Sector counter

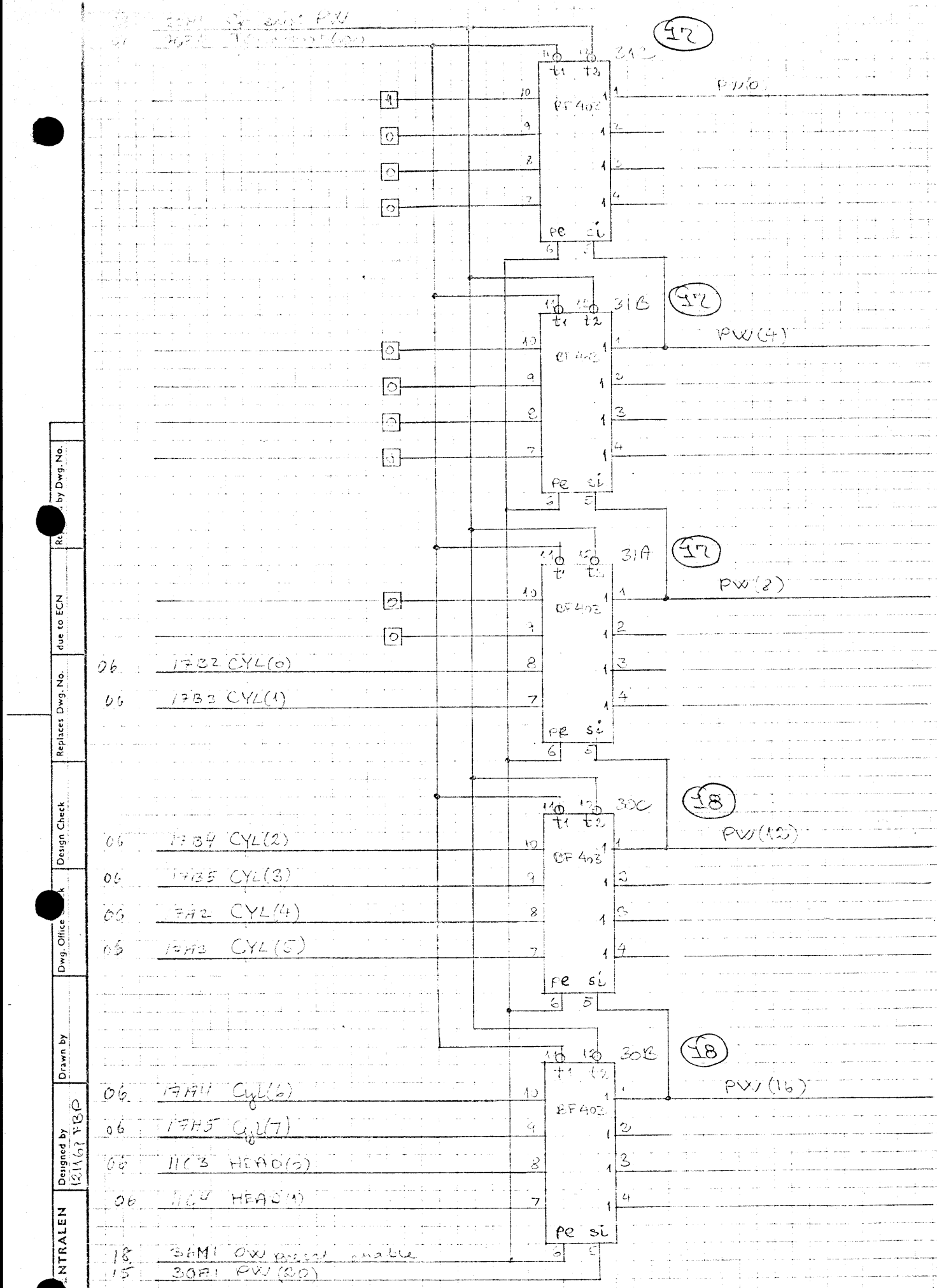




Unit	WRITE CONTROL		DFC-G
Dwg. No. V11813			

A/S REGNCENTRALEN

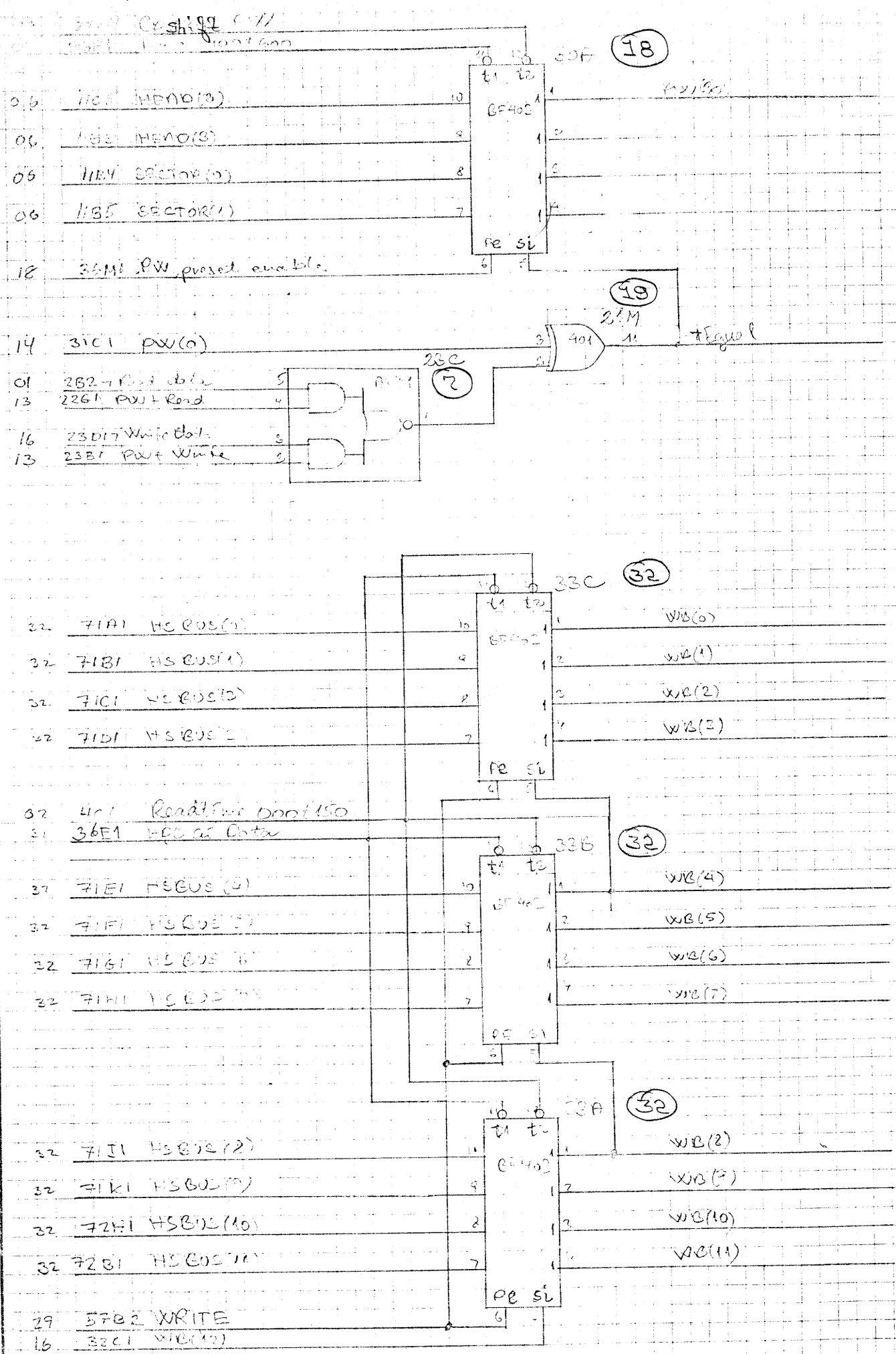
Designed by | Drawn by | Dwg. Office | Design Check | Replaces Dwg. No. | due to ECN | Re... by Dwg. No.



Unit RC4000	PARITY WORD PW(0:15)	
Dwg. No. V11814	Logic Diagram	

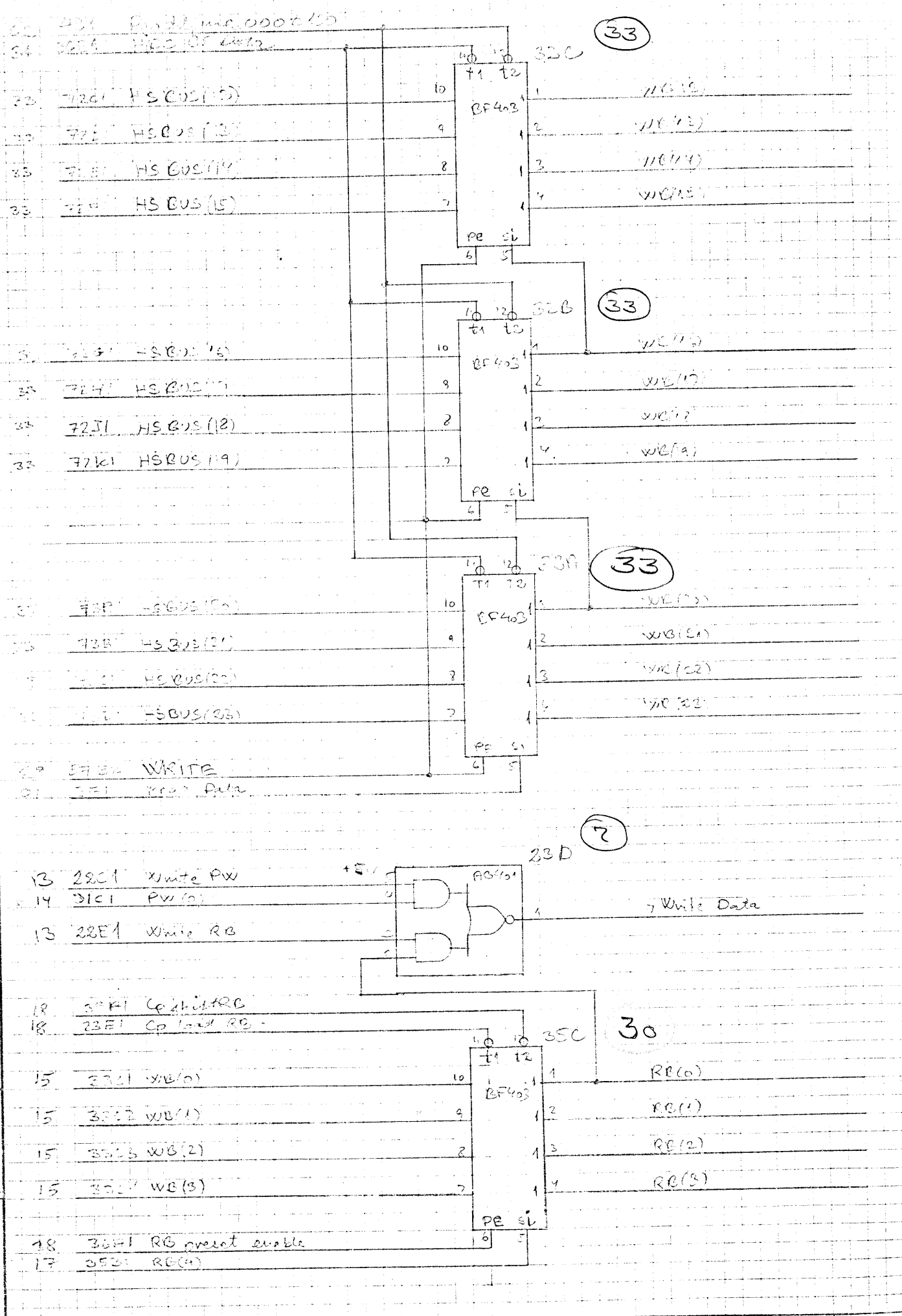
A/S REGNECENTRALEN | Designed by 12/11/67 TBP | Drawn by | Dwg. Office Check | Design Check | Replaces Dwg. No. | due to ECN | Revised by Dwg. No.

RC 4000 V8 140



Unit	RC4000	WRITE BUFFER, WB(0:11), PARITY WORD, PW(20:23)		DEC
Dwg. No.	V11815	Logic Diagrams		

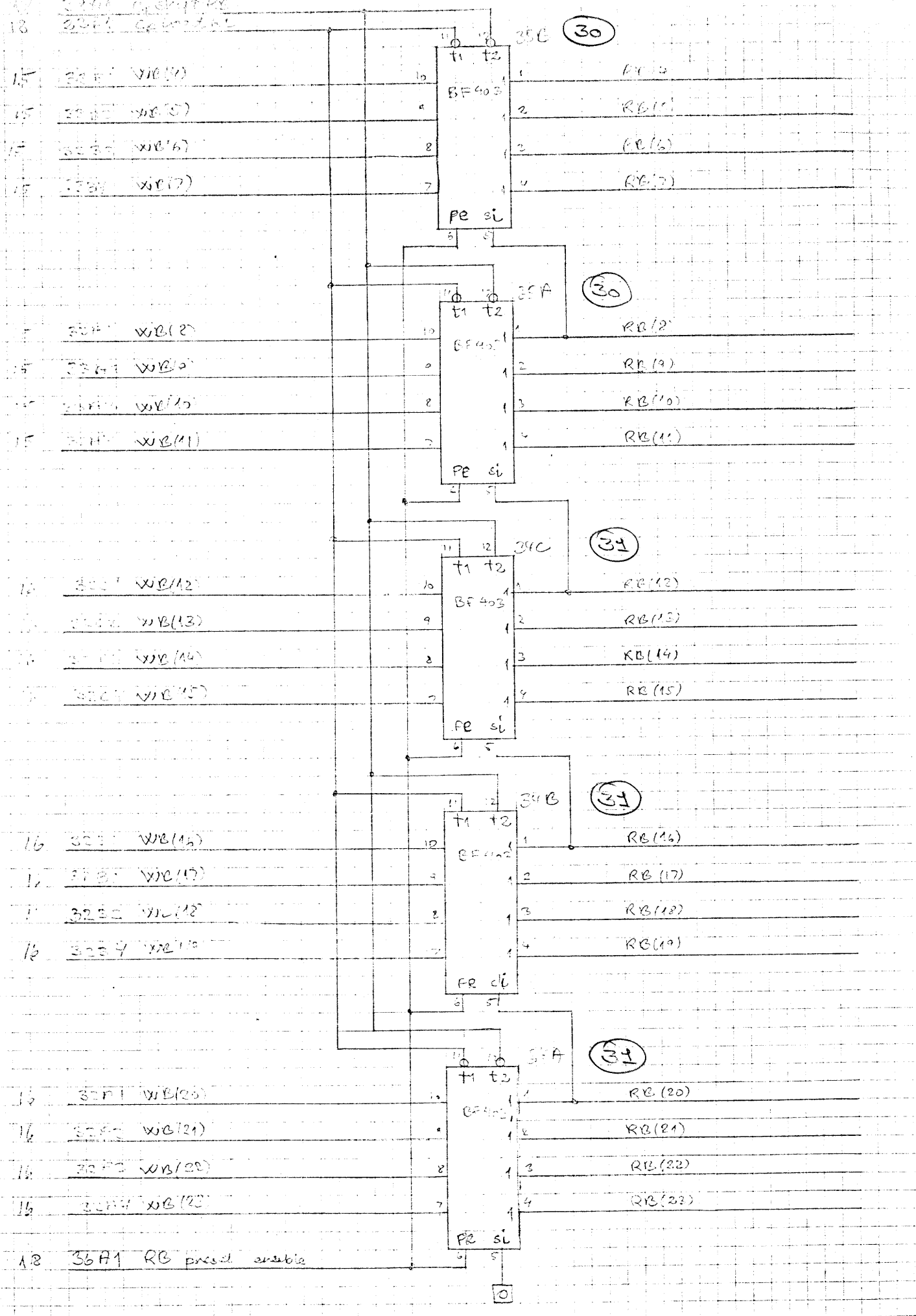
A/S REGNCENTRALEN | Designed by FBP 13/1169 | Drawn by | Dwg. Office | Design Check | Replaces Dwg. No. | due to ECN | Dwg. No.



Unit RC4000	READ BUFFER RB(0:3) ; WRITE BUFFER WB(12:33)		DFC -
Dwg. No. V11816	Logic Diagram		

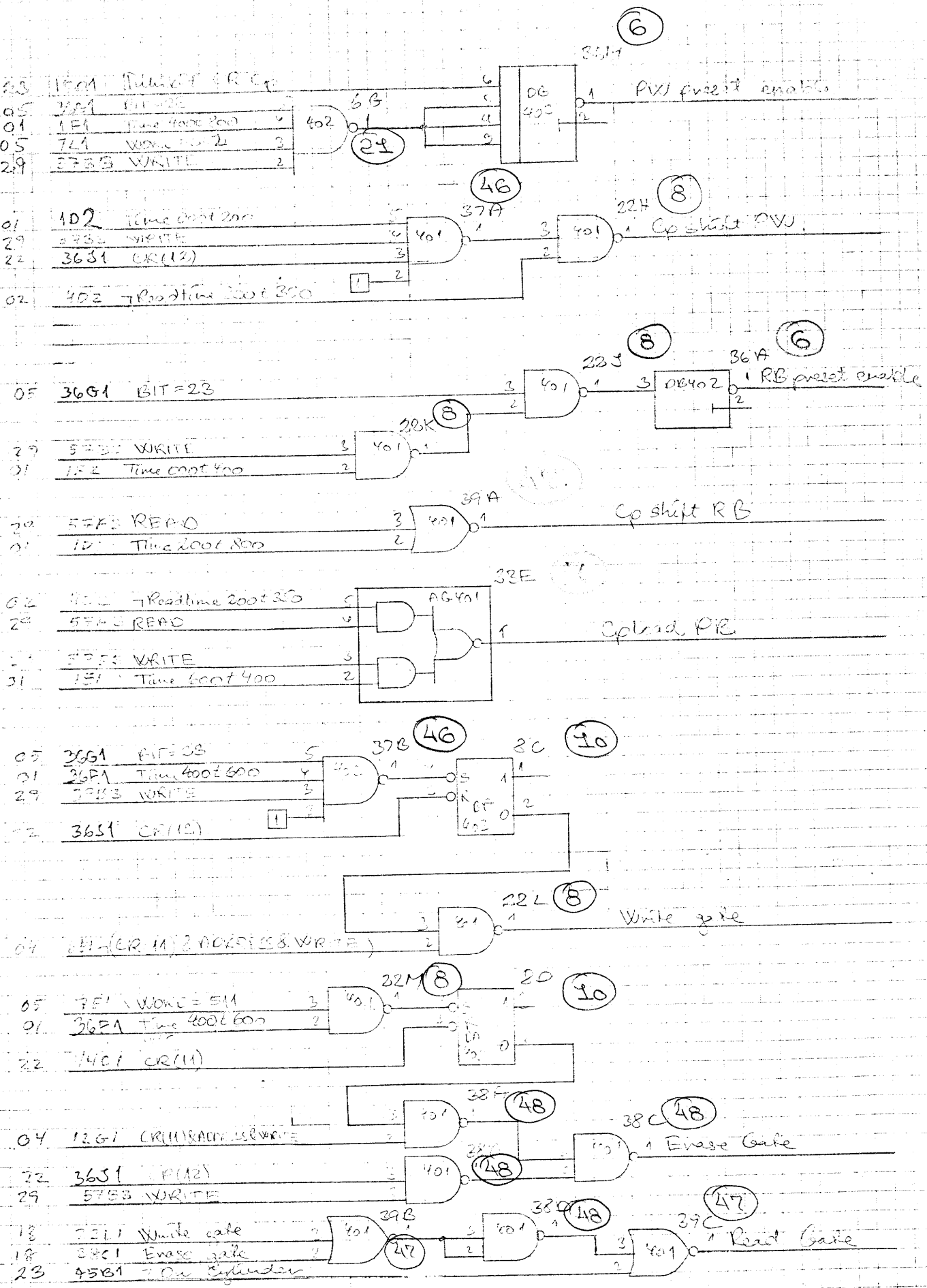
Designed by | Drawn by | Design Check | Dwg. Office C | Replaces Dwg. No. | Repl | Dwg. No. | due to ECN

A/S REGNECENTRALEN



Rep	Dwg. No.						
	due to ECN						
	Replaces Dwg. No.						
	Design Check						
	Dwg. Office C						
	Drawn by						
	Designed by	12/1/69 FBP					
A/S REGNECENTRALEN			Unit RC 4000	READ BUFFER RB(A)(23)			DRG.
			Dwg. No. V11817	Logic Diagram			

RC rev V8.1-0

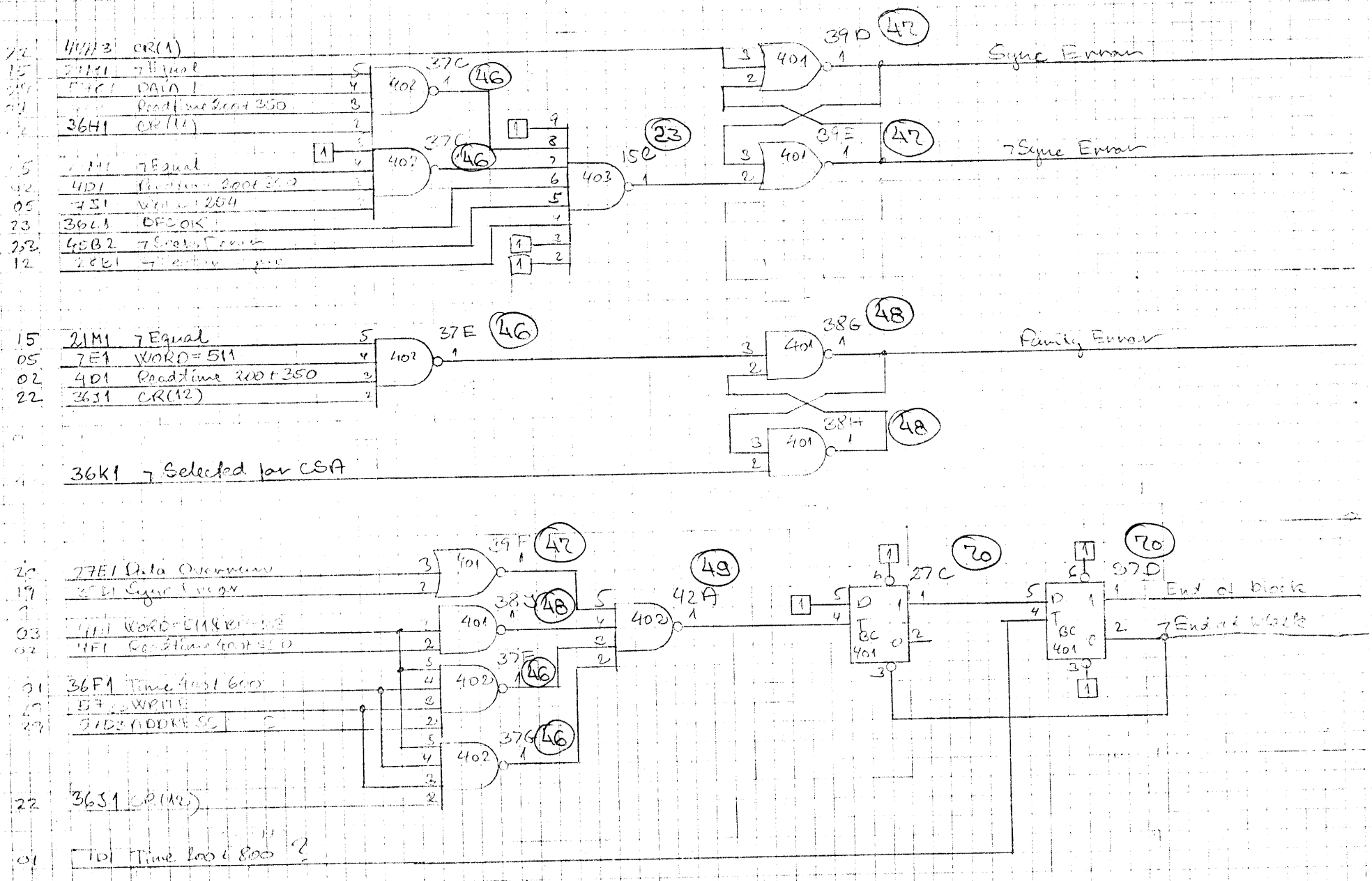


Unit	RC 4000	PW, RC CONTROL, OSD READ-WRITE CONTROL	DFC-D
Dwg. No.	V11818		

A/S REGNECENTRALEN

Designed by | Drawn by | Dwg. Office Check | Design Check | Replaces Dwg. No. | due to ECN | Rep. by Dwg. No.

ISO A1 size VB 140

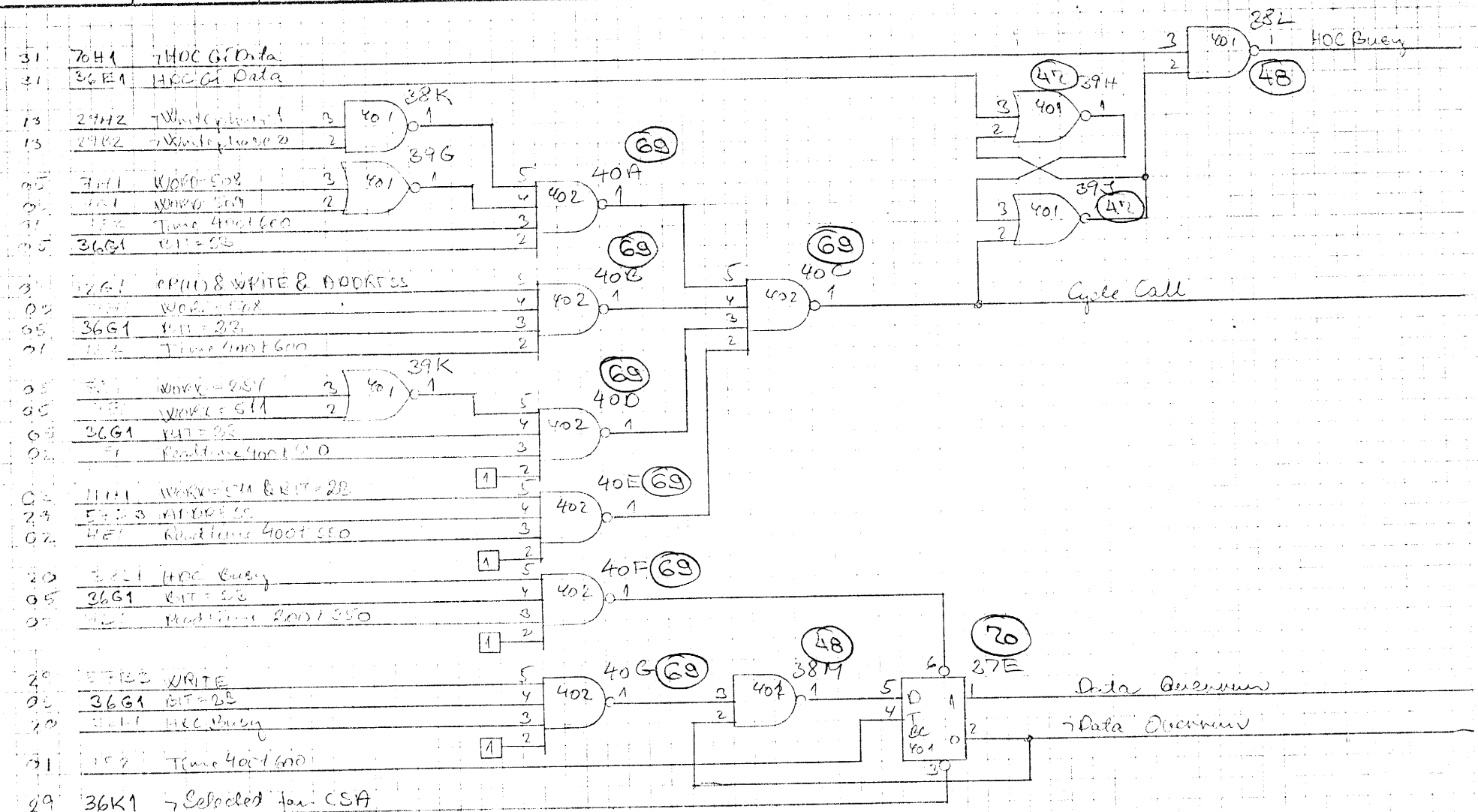

40/13 OR(1)
21M1 7Equal
7E1 DATA 1
Readtime 2001350
36H1 CR(11)
21M1 7Equal
4D1 Readtime 2001350
7J1 WORD=1254
36L1 DFSOK
4EB2 7Sync Error
7E2 7Data Error
402
37C
46
403
15C
23
401
39D
47
Sync Error
39E
7Sync Error
15 21M1 7Equal
05 7E1 WORD=511
02 4D1 Readtime 2001350
22 36J1 CR(12)
37E
386
48
Family Error
381+
36K1 7Selected for CSA
27E1 Data Overrun
2EB1 Sync Error
4H1 WORD=1148
4F1 Go Status 2001350
36F1 Time 4001600
57 WPMS
31D2 MODEM SC
36J1 CR(12)
7D1 Time 2001800 ?
39F
38
37F
37G
42A
49
27C
70
37D
End of block
7End of block

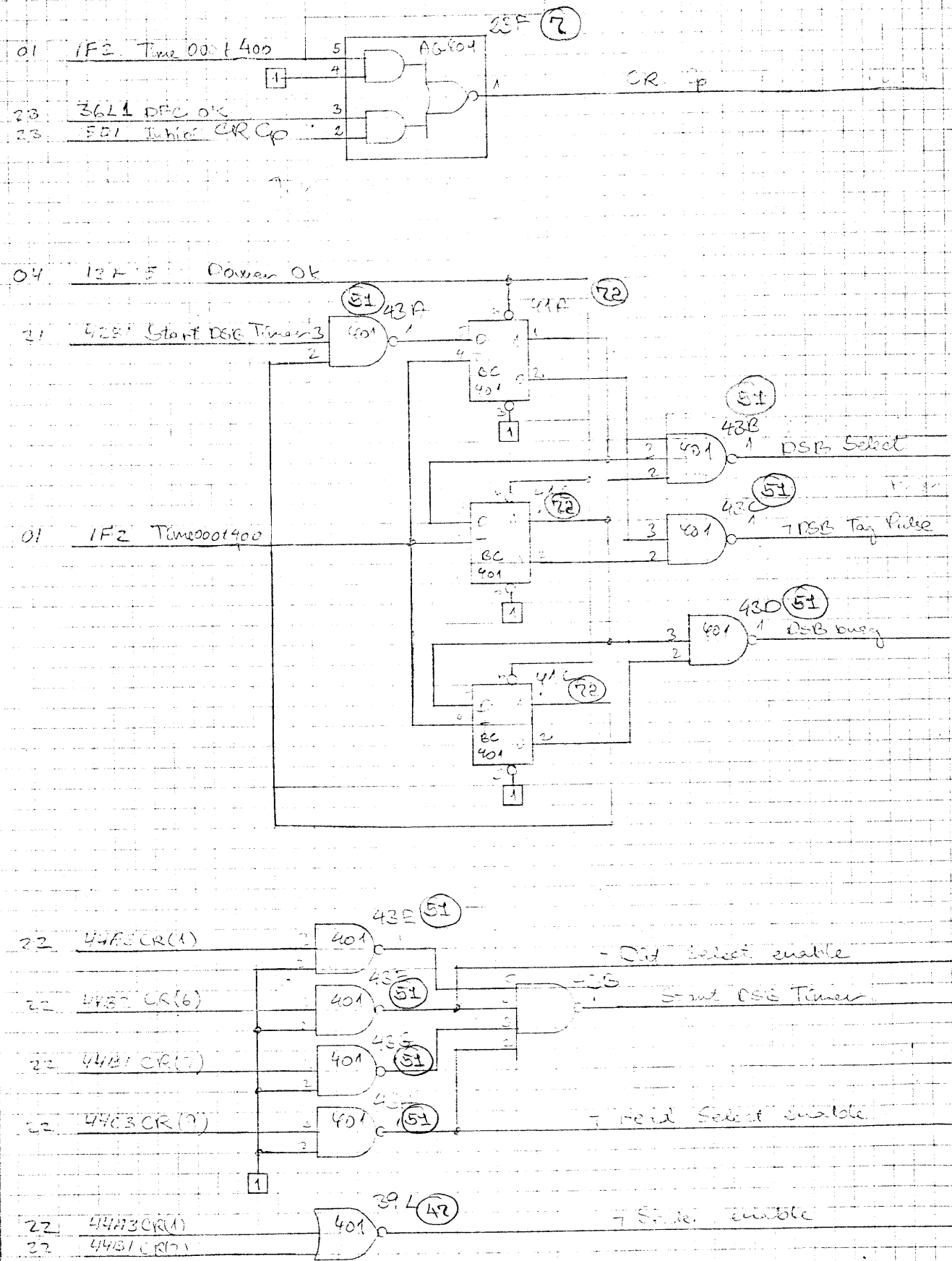
A/S REGNECENTRALEN	Designed by	Drawn by	Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	Replaced Dwg. No.

Unit RC4000 Dwg. No. VB1220

CYCLE CALL AND DATA OUTPUT

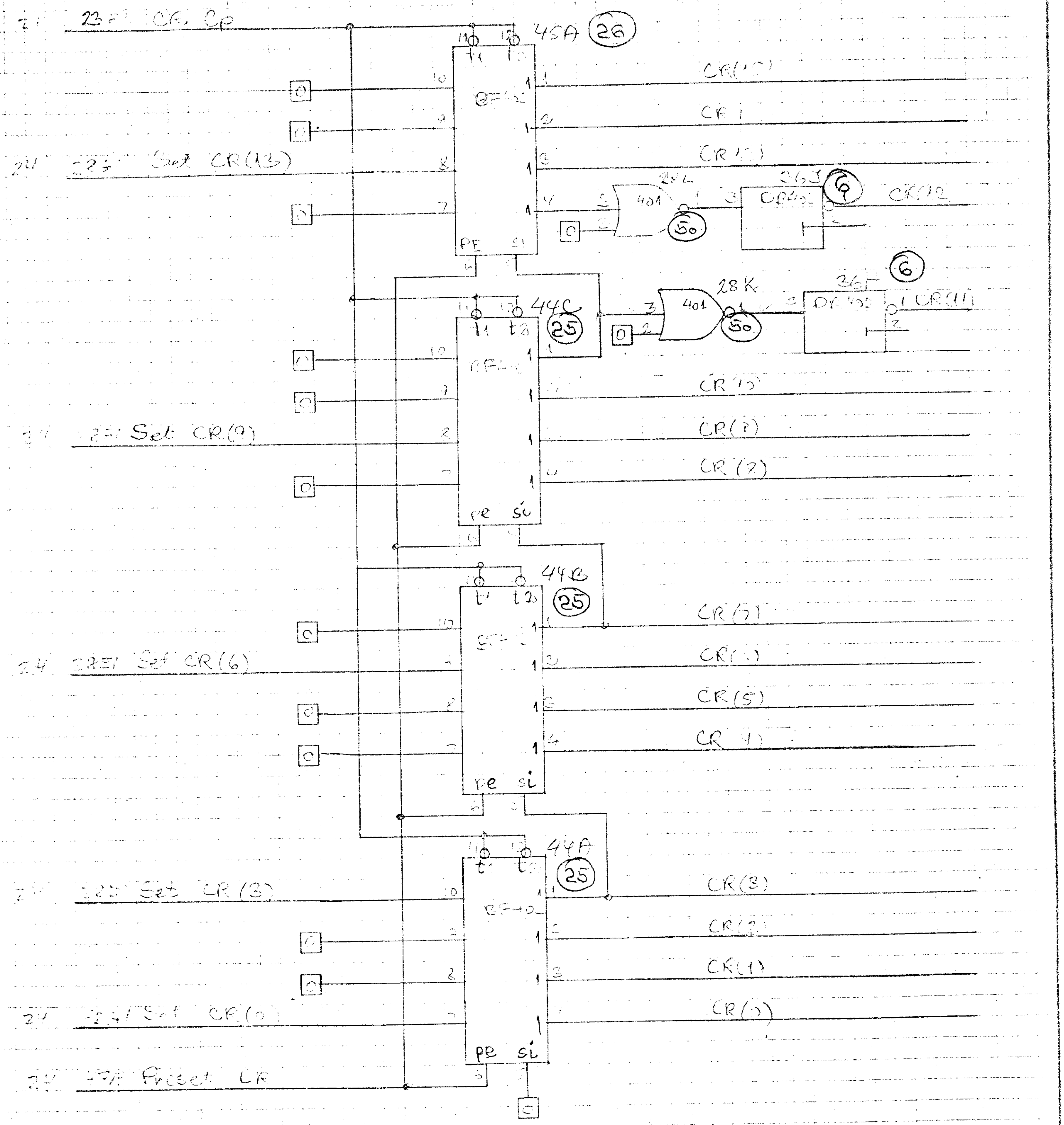
Audio Division





Unit	DISK STORAGE BUS TIMER		DFC-21
Dwg. No. V11821	Logic Diagram		

TRALEN A/S REGNE
Designed by 1711/67 FIBO
Drawn by
Dwg. Office C
Design Check
Replaces Dwg. No.
due to ECN
Repl
Dwg. No.



A/S REGNECENTRALEN

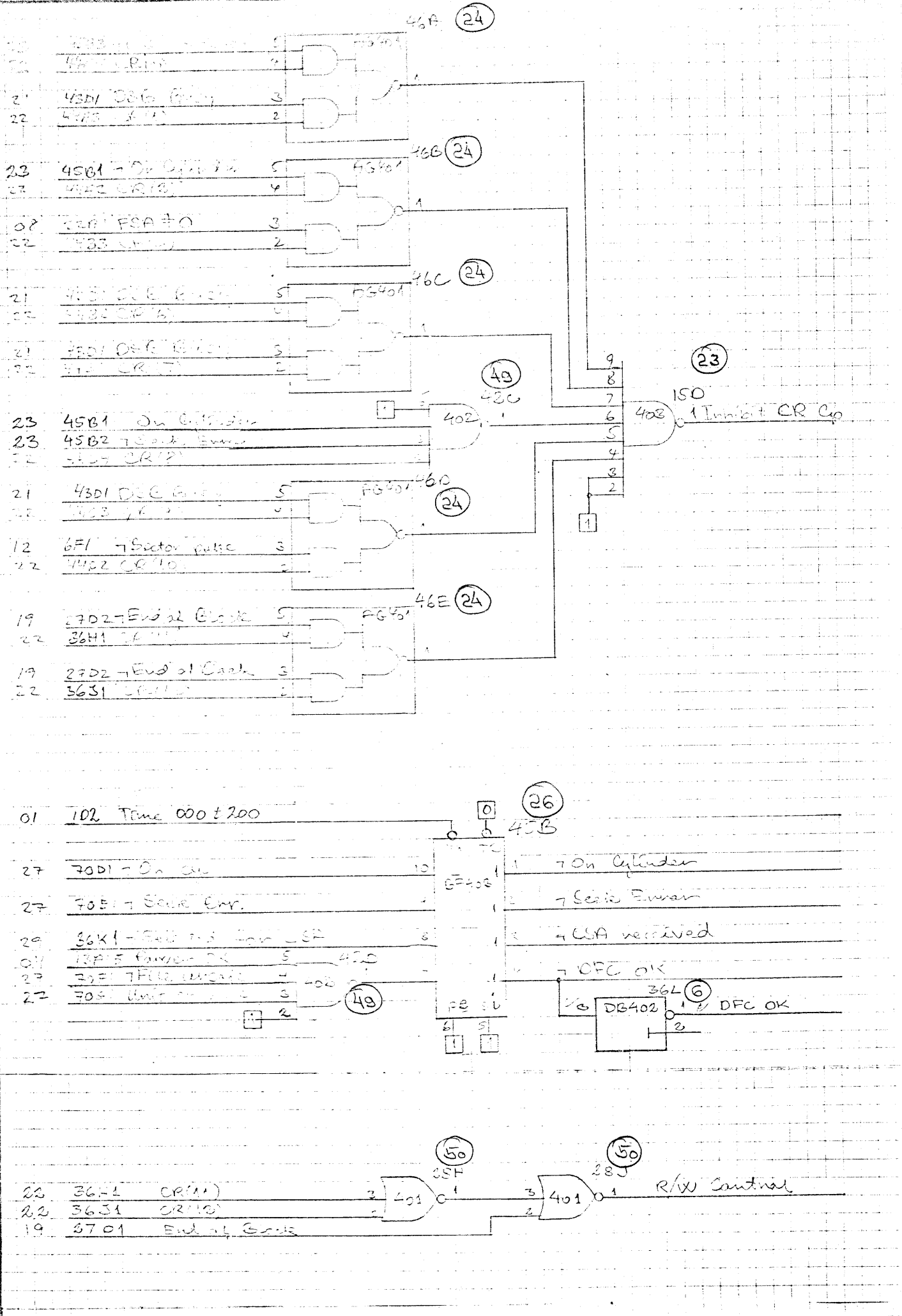
Designed by 13.11.69 FOF

Unit RC4000

Dwg. No. V11822

CONTROL REGISTER, CR (0:15)

Logic Diagram



Unit: RC4000	CR CONTROL		DFC-13
Dwg. No.: V11823	Logic Diagram		

A/S REGNECENTRALEN

Designed by: V11161 FBG

Drawn by

Dwg. Office Check

Design Check

Replaces Dwg. No.

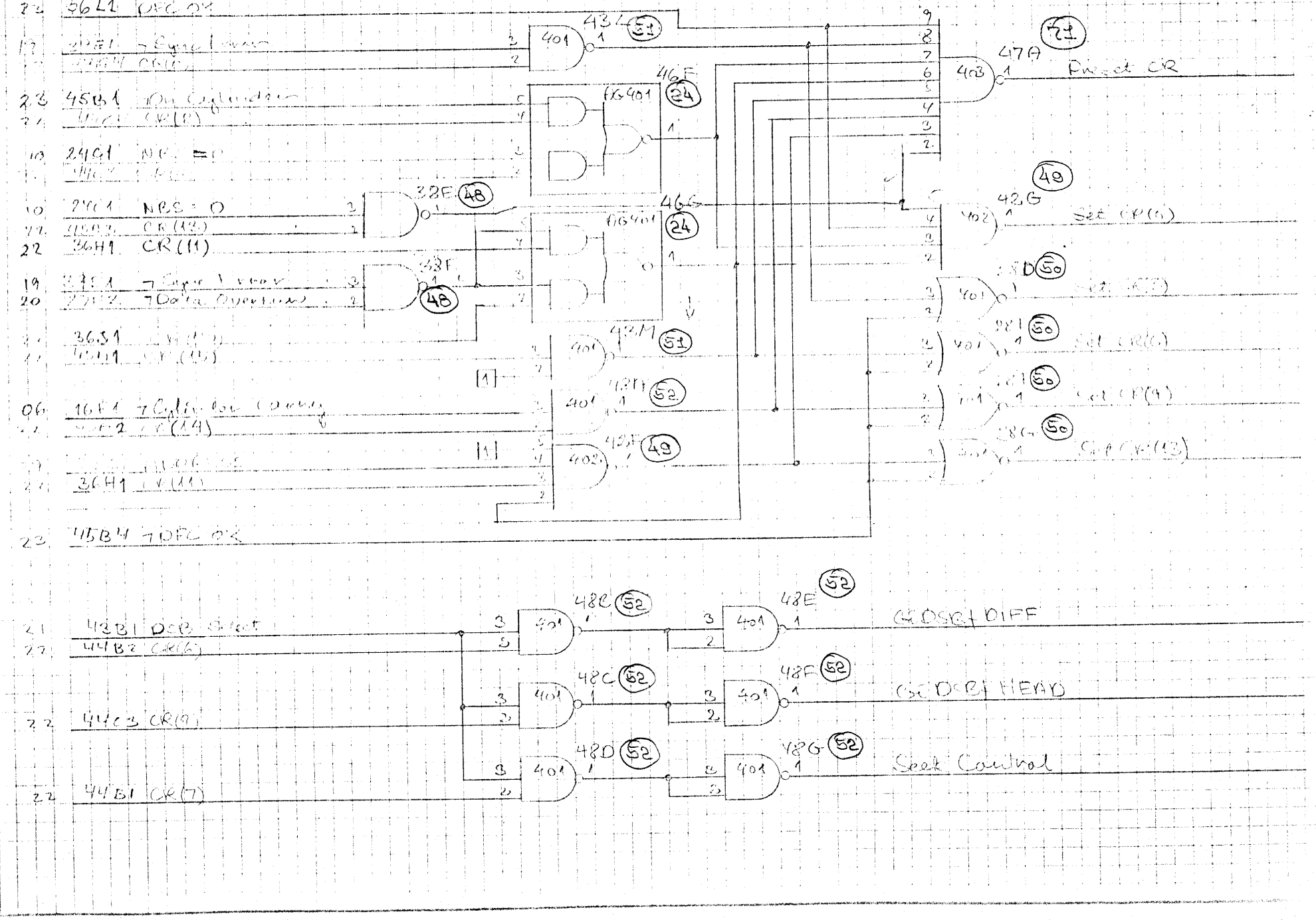
due to ECN

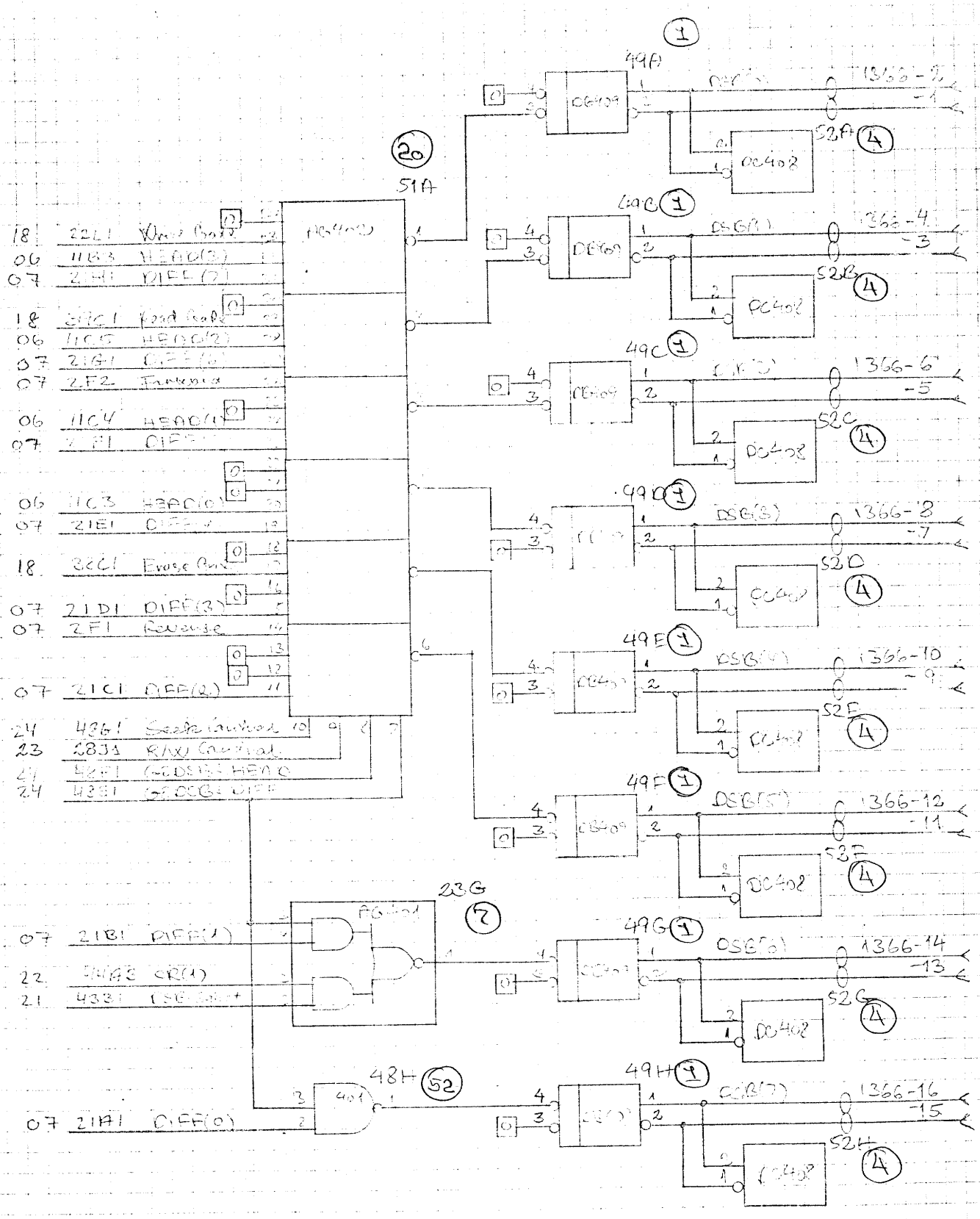
Rep. / Dwg. No.

Format: VB 149

A/S REGNECENTRALEN	Designed by 27/1/69 FBF	Drawn by	Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	ed by Dwg. No.

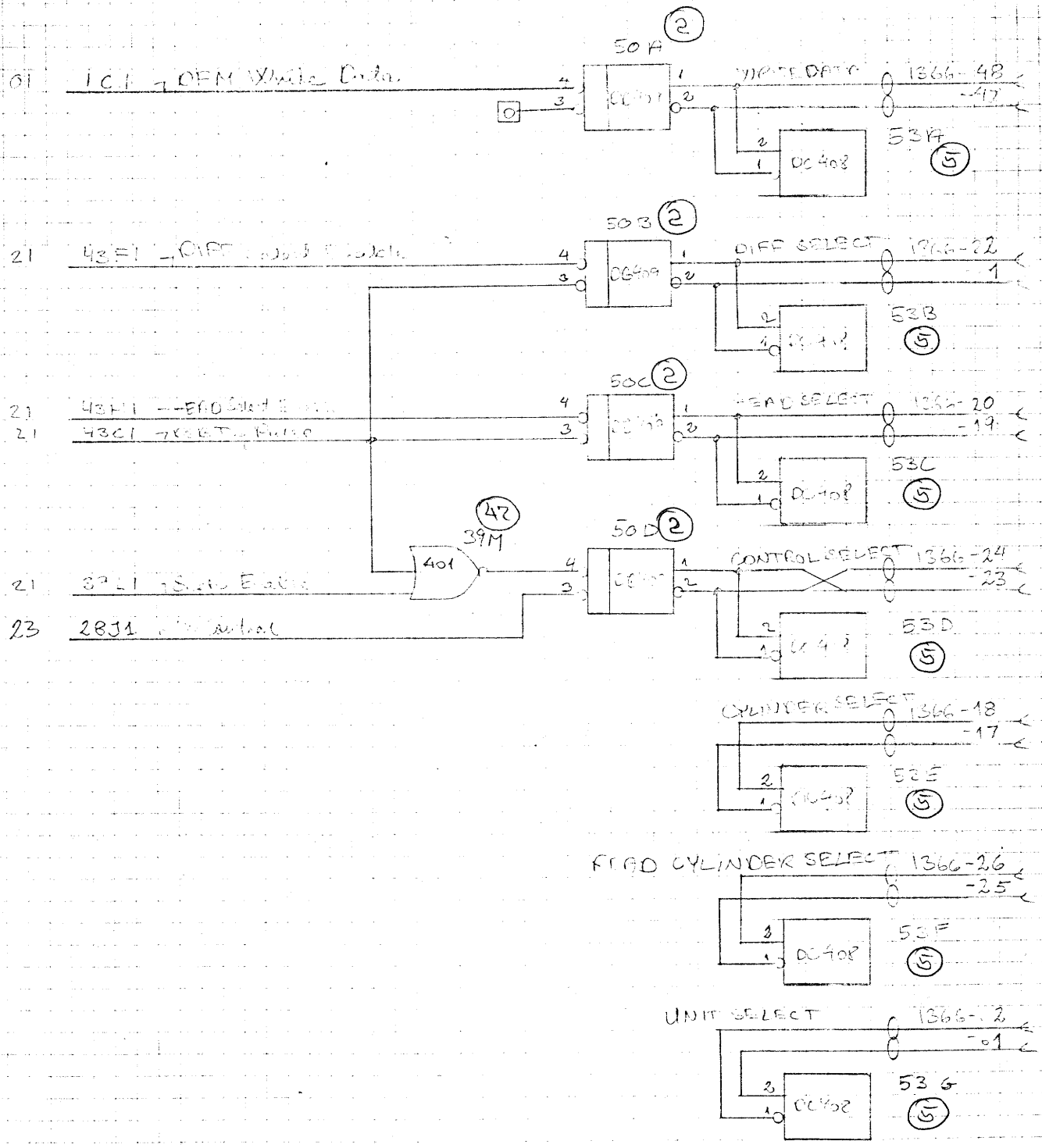
Unit RC 4000 Dwg. No. VA 1S 24





Unit RC4000	DISK STORAGE BUS; DSB(0:7)		DFC-C
Dwg. No. V11825	Logic Diagram		

Designed by 02/11/68 FHP
Drawn by
Design Check
Dwg. Office C
Replaces Dwg. No.
due to ECN
Rep
y Dwg. No.
AJS REGNECENTRALEN
Form VS 140



Unit RC4000	SIGNALS FROM CONTROLLER TO DSD		DFC-036
Dwg. No. V11826	Logic Diagram		

A/S REGNECENTRALEN

Designed by

Drawn by

Dwg. Office Check

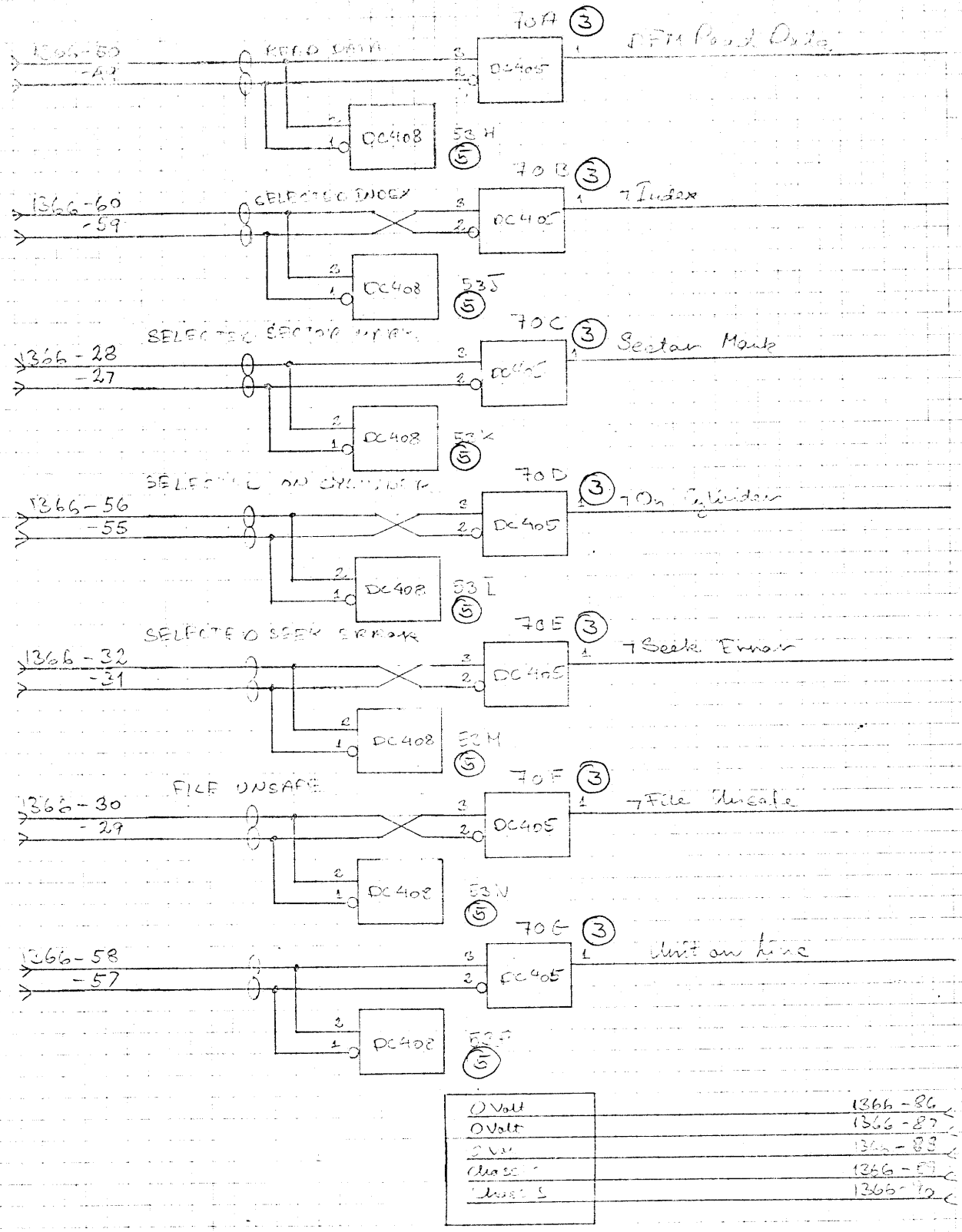
Design Check

Replaces Dwg. No.

due to ECN

Replaced by Dwg. No.

IC dwg. VII 140

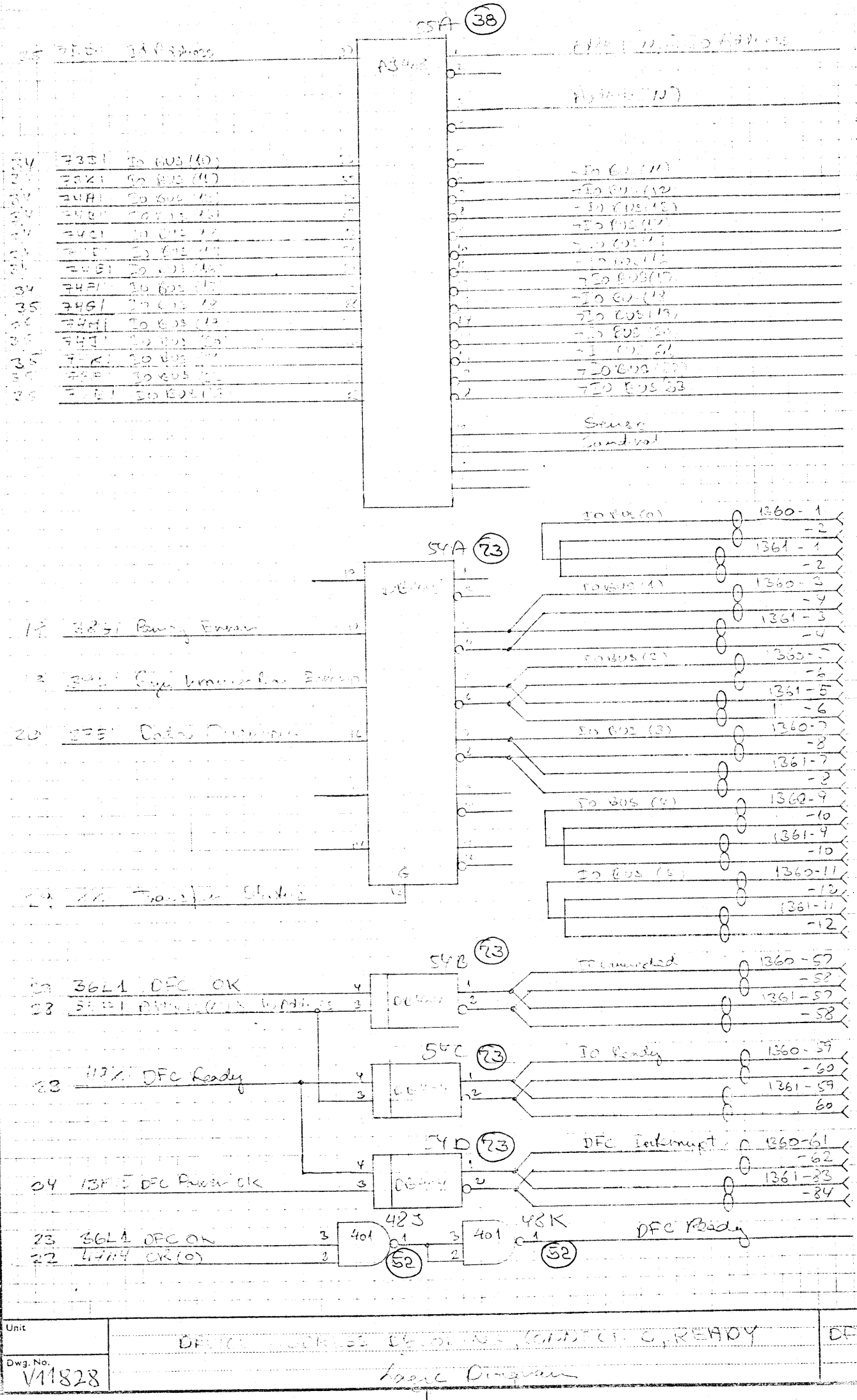


Designed by	Drawn by	Dwg. Office Check	Design Check	Replaces Dwg. No.	due to ECN	d by Dwg. No.	
20 AUG 69 FBS/C							

CENTRALEN
A/S REGNECENTRALEN

Unit RC 4000	Signals from DCD to Control	DFC-27
Dwg. No. V11827	Logic Diagram	

PC doc V3 140



Unit	DFC - CHECKS DFC ON, DFC OK, DFC READY
Dwg. No. V11828	Logic Diagram

DFC-22

A/S REGNECENTRALEN

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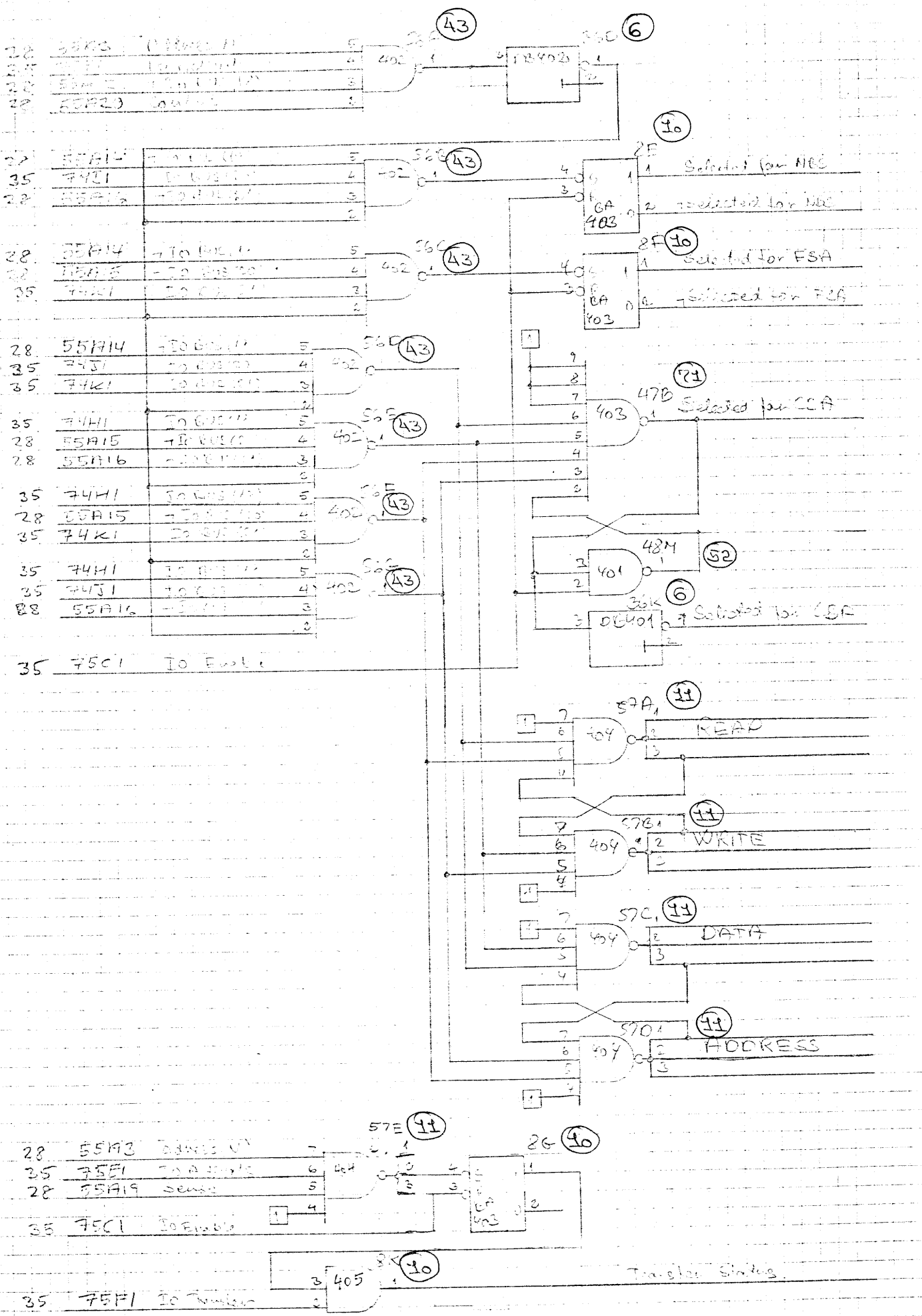
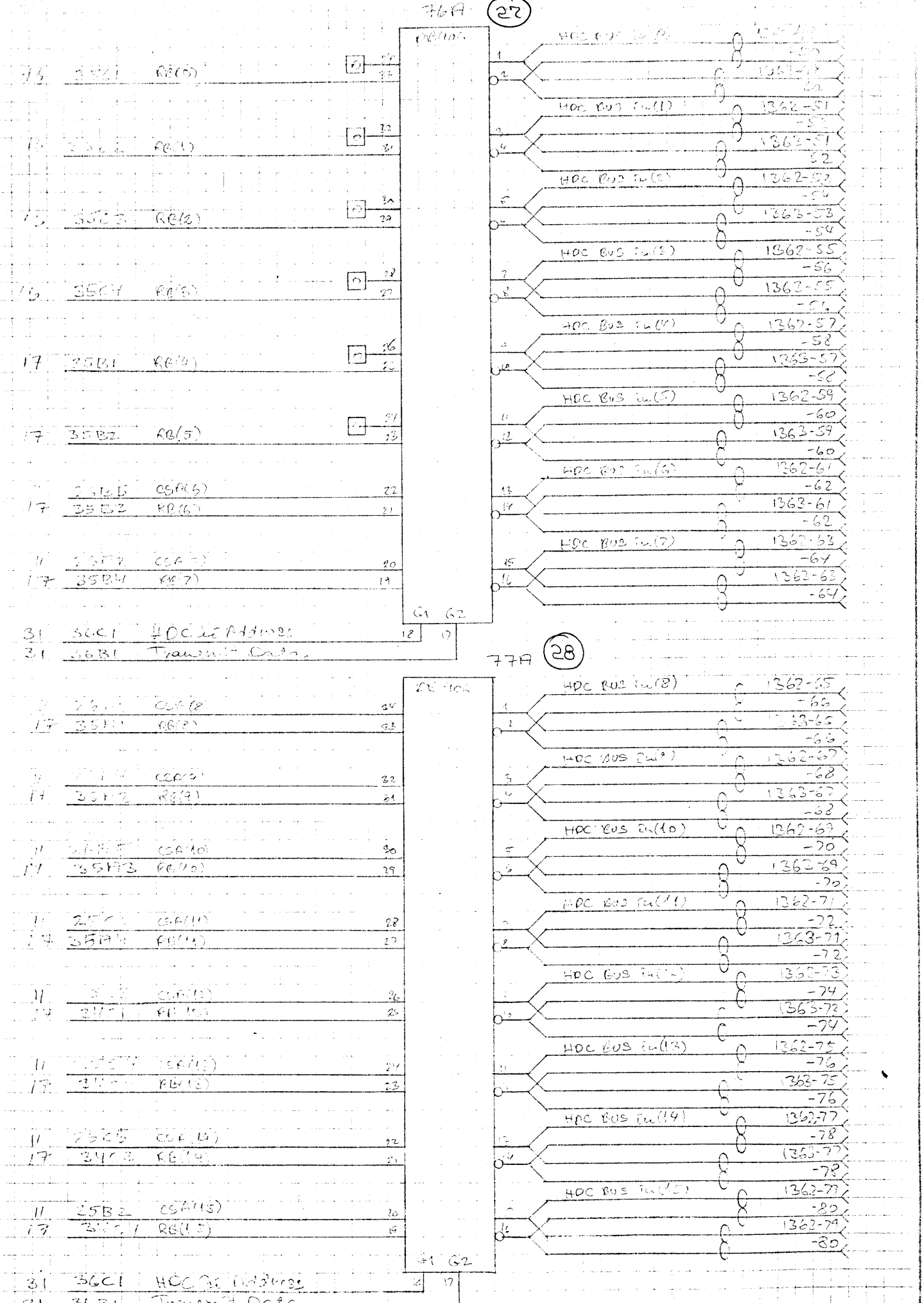
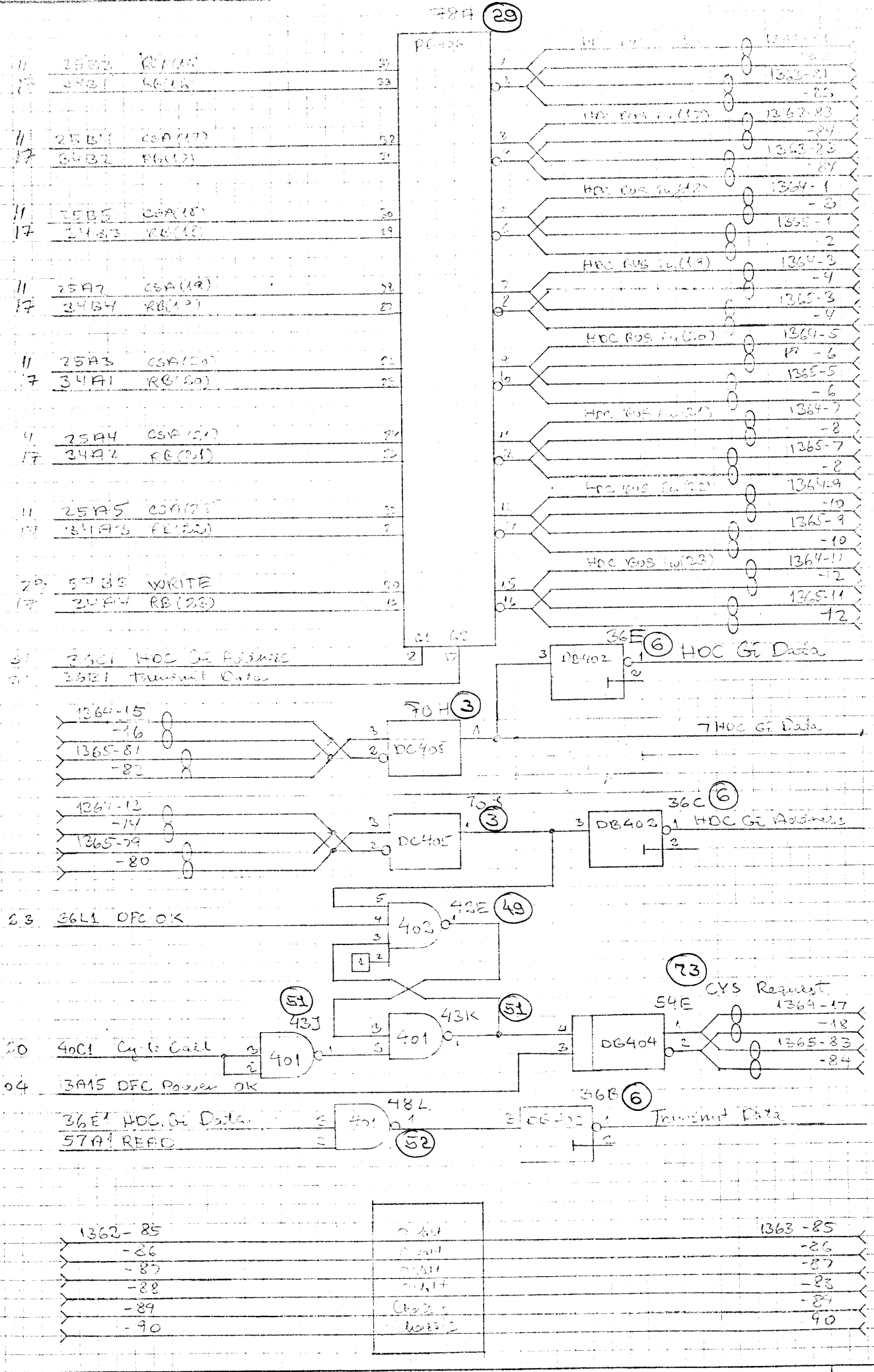
RC doc. V8-140


Selected for NBC
Selected for FSA
Selected for CCA
Selected for CBA
READ
WRITE
DATA
ADDRESS
Transfer Status
Dwg. No. V11829



Unit	R4000
Dwg. No.	V11830
	HDC BUS In(0:15)
	Logic Diagrams
	DEC-22

Designed by
Drawn by
Design Check
Dwg. Office
Replaces Dwg. No.
Released by Dwg. No.
due to ECN
ZENTRALEN
A/B REGN
DEC doc. V8.140



Unit: Regnec

Dwg. No.: V11831

HDC BUS (w/16:23) and HDC Control

Logic Diagram

Doc.

A/S REGNECENTRALEN

Designed by: 181169 FKP

Drawn by

Dwg. Office Check

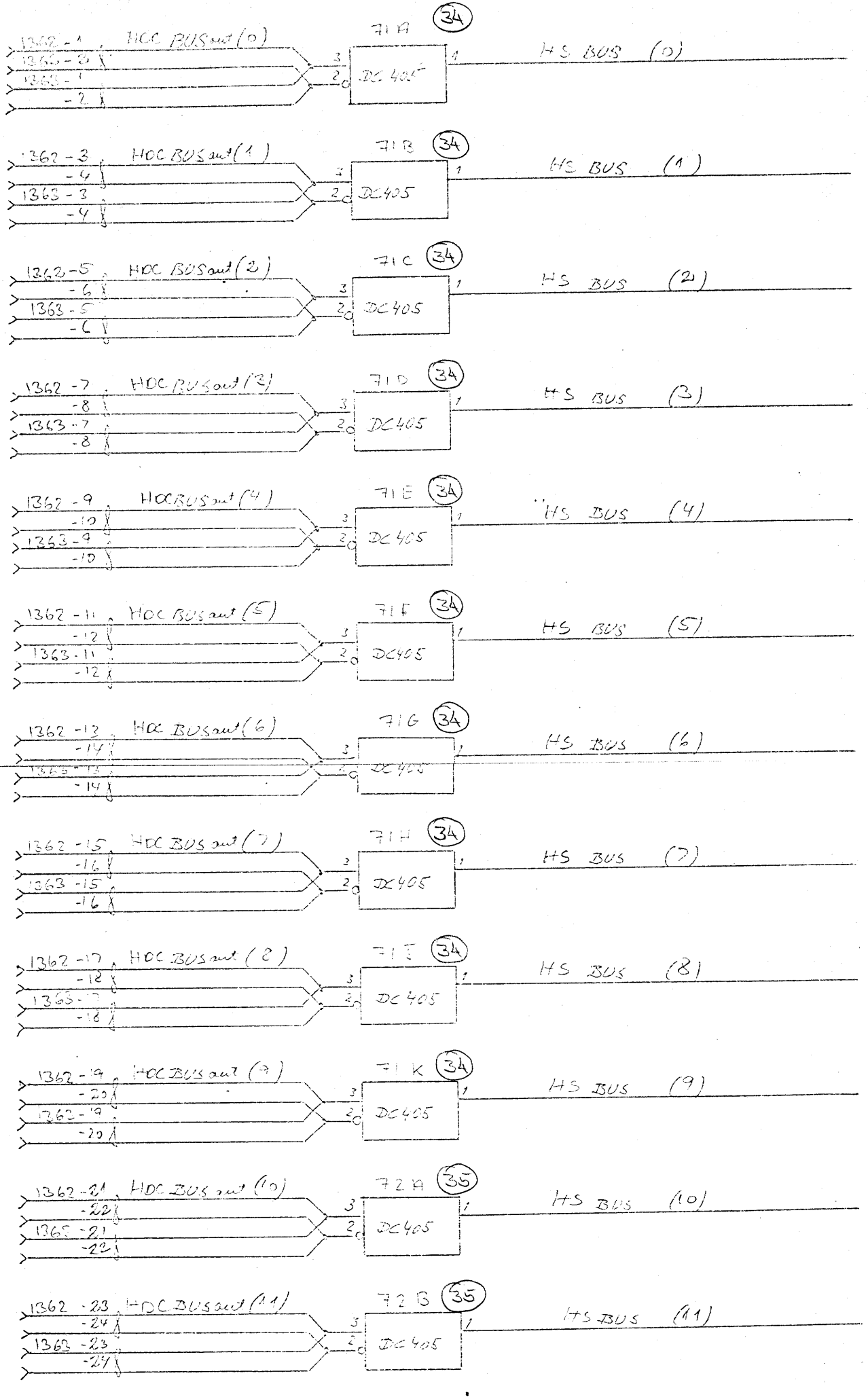
Design Check

Replaces Dwg. No.

Dwg. No. due to ECN

Rev.

V11-140



Unit RC4000

HDC BUS-out (0:11)

Dwg. No. V11832

Logic Diagram

A/S REGNECENTRALEN

Designed by 221167 FRX

Drawn by

Dwg. Office

Design Check

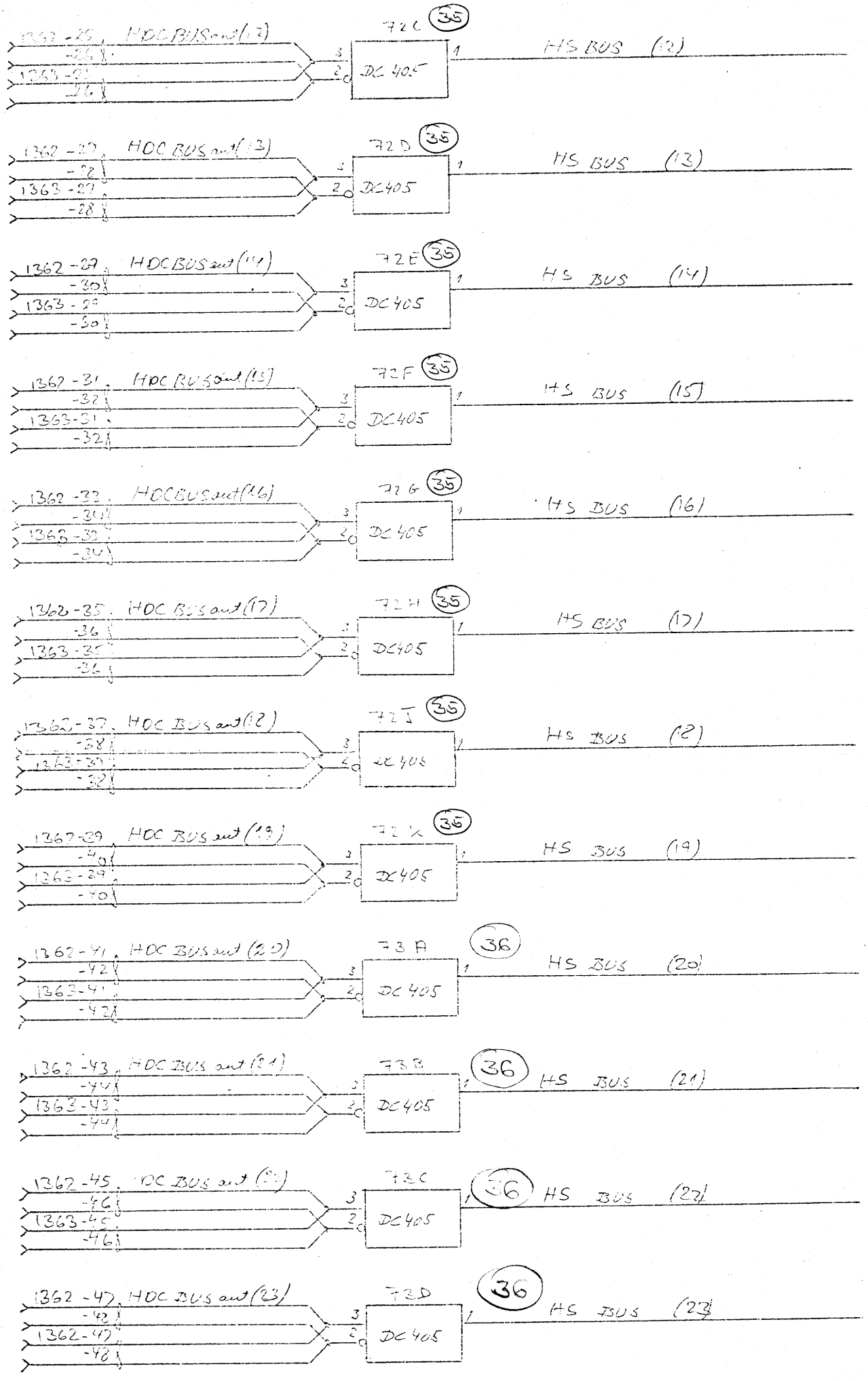
Replaces

Dwg. No.

Due to ECN

Dwg. No.

DTP formular 2/11 68



Unit RC4000	HDC BUS out (12:23)	OFC 033
Dwg. No. V11833	Logic Diagram	

A/S REGNTRALEN

Designed by 2811 69 TBK

Drawn by

Dwg. Office

Design Check

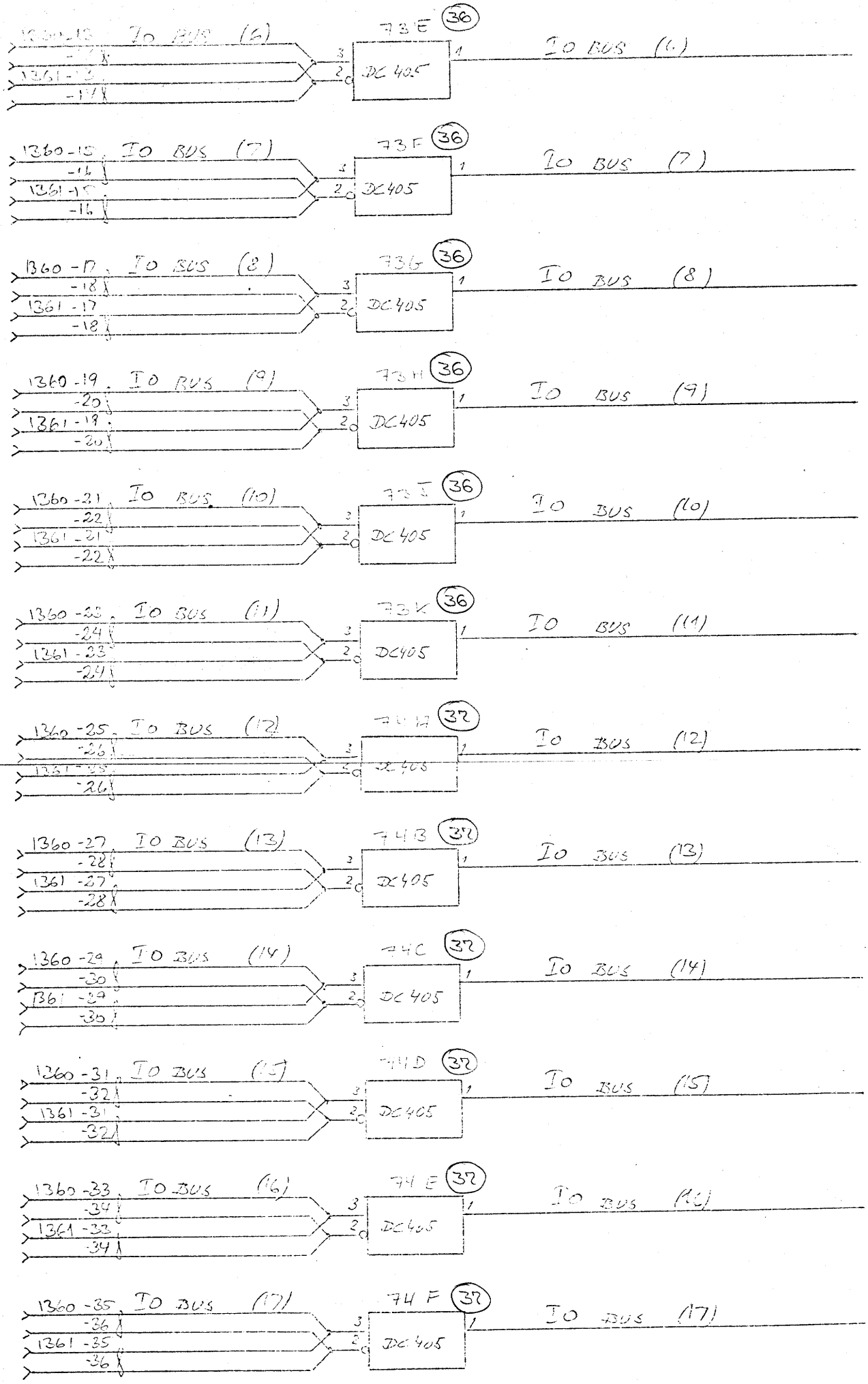
Replaces Dwg. No.

Due to ECN

Rel. by Dwg. No.

12-15 P tomatter 4/11 68

Form VR 140



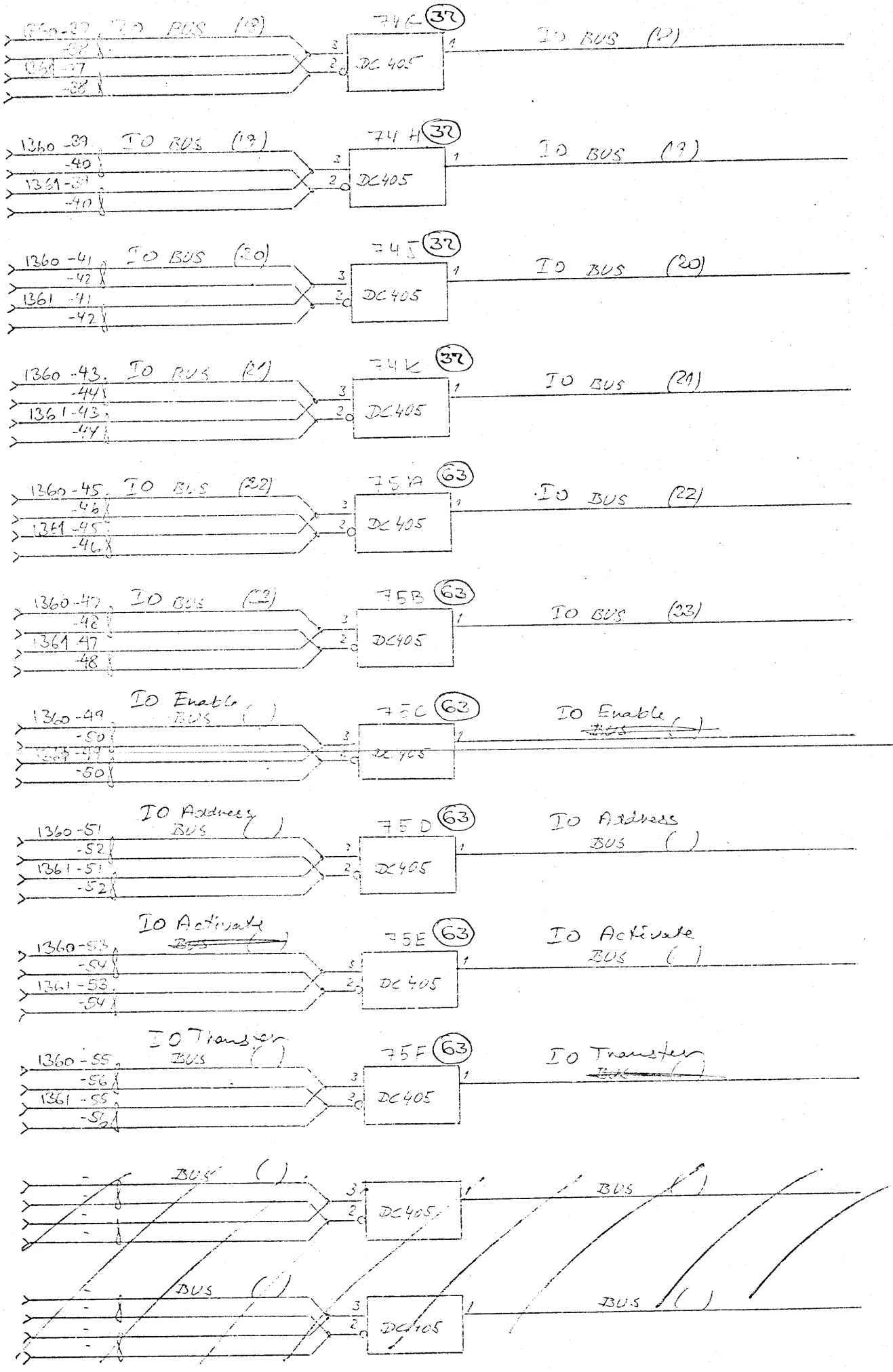
Unit RC4000

Dwg. No. V11834

IO BUS (6:17)

Logic Diagram

DRC



Unit: RC4000	IO BUS (18-23)	DEC DEC
Dwg. No. V11835	IO Enable, IO Address, IO Activate, and IO Transfer Logic Diagram	

NTRALEN A/S REGN

Designed by 22/11 69

Drawn by

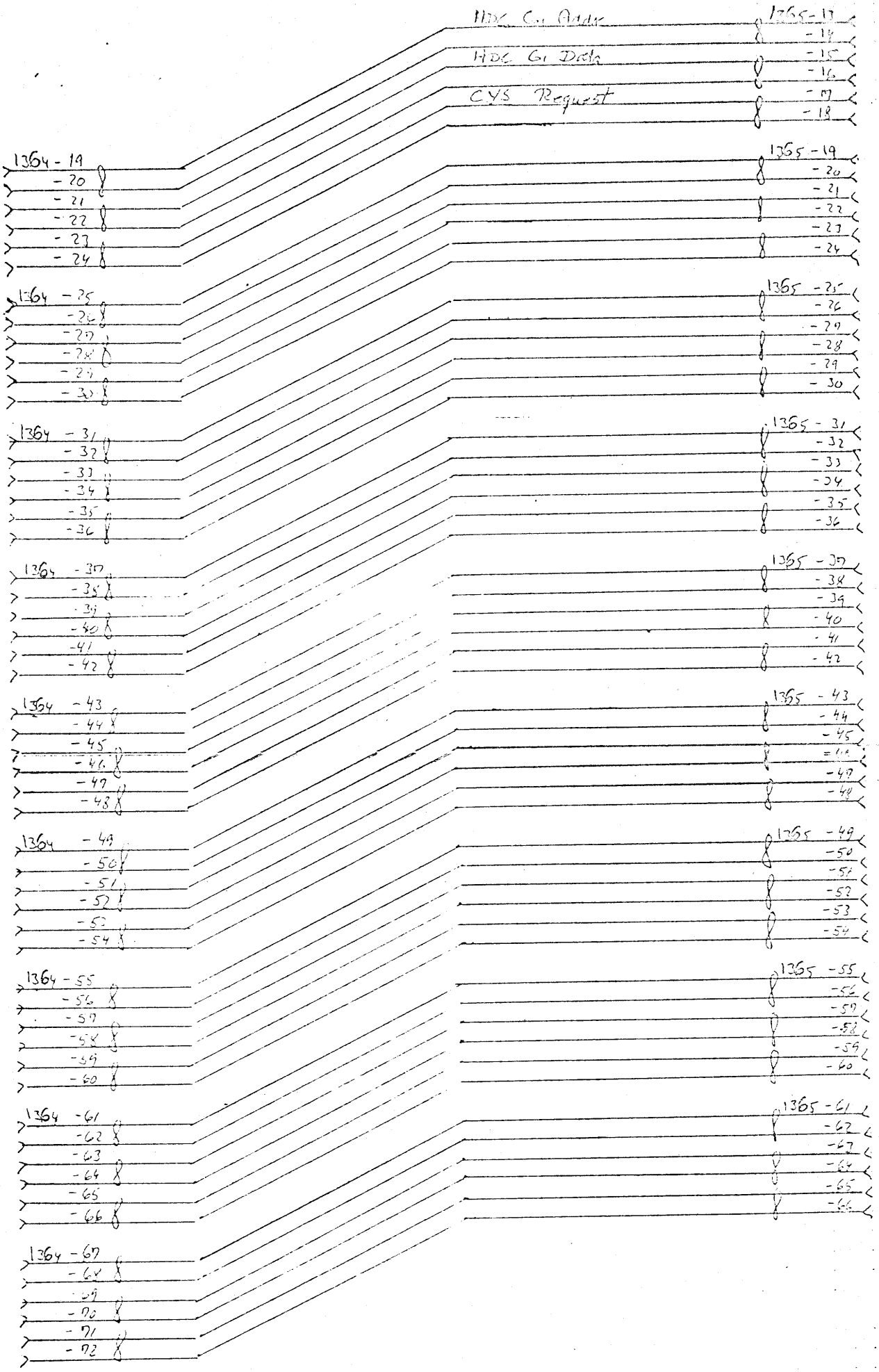
Dwg. Office

Design Check

Released Dwg. No.

Dwg. No. to I.C.N.

Rel. by Dwg. No.



910364 PEP
28169 FSD

A/S REGNTRALEN

Designed by

Drawn by

Dwg. Office

Design Check

Replaces Dwg. No.

due to ECN

Dwg. No. by Dwg. No.

Unit RC4000

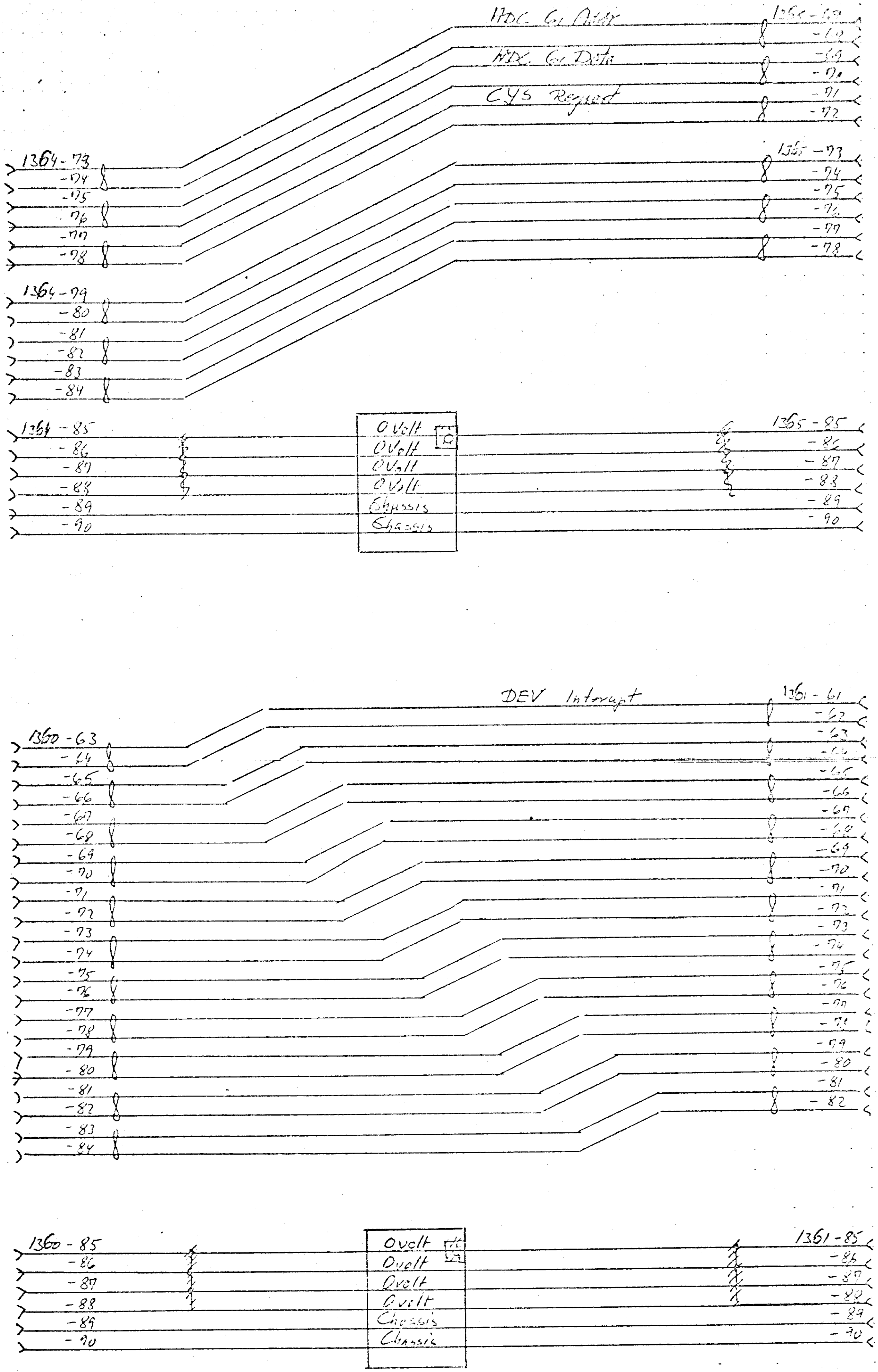
Dwg. No. V11836

HDC Cable Connections

Logic Diagram

DFC036

RC nx V8.140



Unit RC4000	HDC and LDC Cable Connection
Dwg. No. V11837	Logic Diagram

DFC037

A/S REGNECENTRALEN

Designed by 22/10-68 PEP · 020369 PEP · 281169 PEP | Drawn by | Dwg. Office | Design Check | Replaces Dwg. No. | due to ECN | Replaced by Dwg. No.